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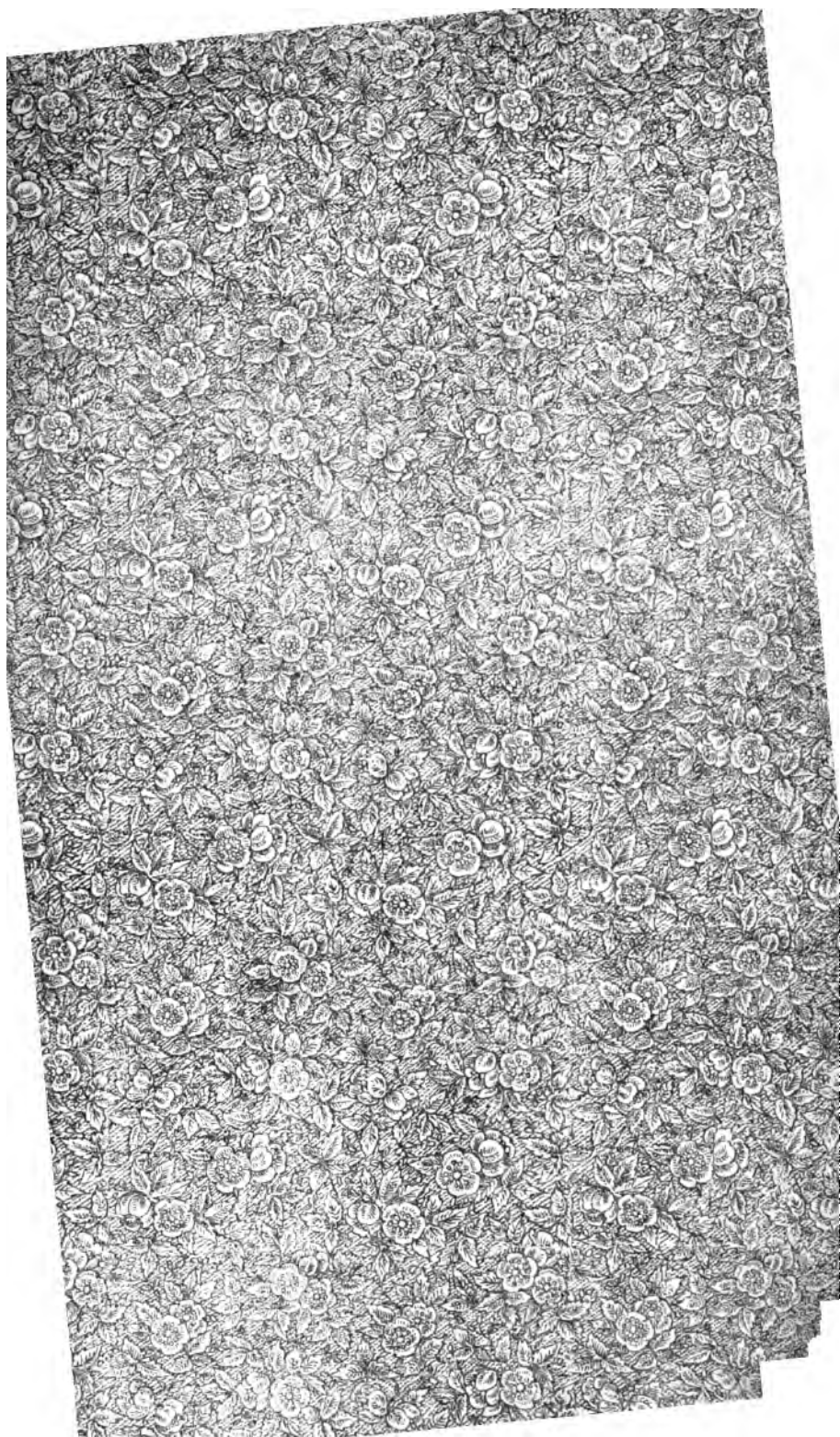
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TWENTY-FIFTH ANNUAL REPORT

OF THE

BOARD OF HEALTH

OF THE

STATE OF NEW JERSEY

AND REPORT OF THE

BUREAU OF VITAL STATISTICS

1901

TRENTON, N. J. :
THE JOHN L. MURPHY PUBLISHING CO., PRINTERS.
1902.

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TRENTON, N. J., October 31st, 1901.

To His Excellency Foster M. Voorhees, Governor of New Jersey:

SIR—I have the honor to herewith transmit the twenty-fifth annual report of the Board of Health of the State of New Jersey, and the report of the Bureau of Vital Statistics for the statistical year ending June 30th, 1901.

Very respectfully,

HENRY MITCHELL,

Secretary.

(1)

Secretary's Report.

Hon. Foster M. Voorhees, Governor :

YOUR EXCELLENCY—The population of New Jersey by the United States census of 1900 was 1,883,669, and the estimated population for 1901 is 1,925,781. Following is a table showing the population of the State by counties and cities of over 5,000 inhabitants for the census years 1890, 1895 and 1900 :

TABLE 1.—SHOWING POPULATION OF COUNTIES AND CITIES OF OVER 5,000 INHABITANTS IN NEW JERSEY, BY U. S. CENSUS OF 1900, COMPARED WITH POPULATION BY STATE CENSUS OF 1895 AND U. S. CENSUS OF 1890.

COUNTIES AND CITIES.	Population, U. S. census 1890.	Population New Jersey, State census 1895.	Population, U. S. census 1900.
Atlantic County	28,836	34,750	46,402
Atlantic City	13,055	18,329	27,838
Bergen County	47,226	65,415	78,441
Englewood	4,785	5,433	6,253
Hackensack	6,004	7,282	9,443
Burlington County	58,528	59,117	58,241
Burlington City	8,198	7,844	7,392
Camden County	87,687	100,104	107,643
Camden City	58,313	63,467	75,935
Gloucester City	6,564	6,225	6,840
Cape May County	11,268	12,855	13,201
Cumberland County	45,438	49,815	51,193
Bridgeton	11,424	13,292	13,913
Millville	10,002	10,466	10,583
Essex County	256,098	312,000	359,053
East Orange	13,282	17,927	21,506
Montclair	8,656	11,753	13,962
Newark	181,830	215,806	246,070
Orange	18,844	22,792	24,141
Gloucester County	28,649	31,191	31,905
Hudson County	275,126	328,080	386,048
Bayonne	19,033	19,856	32,722
Harrison	8,338	9,674	10,596
Hoboken	43,648	54,083	59,364

TABLE 1.—SHOWING POPULATION OF COUNTIES AND CITIES OF OVER 5,000 INHABITANTS IN NEW JERSEY, BY U. S. CENSUS OF 1900, COMPARED WITH POPULATION BY STATE CENSUS OF 1895 AND U. S. CENSUS OF 1890—*Continued.*

COUNTIES AND CITIES.	Population, U. S. census 1890.	Population New Jersey, State census 1895.	Population, U. S. census 1900.
Hudson County—Continued.			
Jersey City.....	163,033	182,713	206,433
Town of Union.....	10,643	13,336	15,187
Hunterdon County.....	35,355	35,334	34,507
Mercer County.....	79,978	85,538	95,365
Trenton.....	57,458	62,518	73,307
Middlesex County.....	61,754	70,058	79,762
New Brunswick.....	18,603	19,910	20,006
Perth Amboy.....	9,512	13,030	17,699
South Amboy.....	4,330	5,571	6,349
Monmouth County.....	69,128	75,543	82,057
Long Branch.....	7,231	7,333	8,872
Morris County.....	54,101	59,536	65,156
Dover.....		5,021	5,938
Morristown.....	10,155	10,290	11,267
Ocean County.....	15,974	18,739	19,747
Passaic County.....	105,046	133,227	155,202
Passaic City.....	13,028	17,894	27,777
Paterson.....	105,046	133,227	105,171
Salem County.....	25,151	26,084	25,530
Salem City.....	5,516	6,337	5,811
Somerset County.....	28,311	30,447	32,948
Sussex County.....	22,259	22,586	24,134
Union County.....	72,467	85,404	99,353
Elizabeth.....	37,764	43,834	52,130
Plainfield.....	11,267	13,629	15,369
Rahway.....	7,105	7,945	7,935
Warren County.....	36,553	37,283	37,781
Phillipsburg.....	8,644	9,081	10,052
Total.....	1,444,933	1,672,942	1,883,669

Births.—The number of births recorded in New Jersey during the year ending June 30th, 1901, was 33,804. This is equivalent to a birth-rate of 17.55 for each thousand of the estimated population. In the counties the birth-rate, as shown by the records, was as follows: Atlantic, 17.585; Bergen, 15.885; Burlington, 12.860; Camden, 15.583; Cape May, 14.167; Cumberland, 18.263; Essex, 21.738; Gloucester, 15.039; Hudson, 21.05; Hunterdon, 12.229; Mercer, 8.394; Middlesex, 18.151; Monmouth, 11.276; Morris, 12.748; Ocean, 16.040; Passaic, 20.175; Salem, 13.926; Somerset, 13.991;

Sussex, 10.841 ; Union, 15.820 ; Warren, 12.354. The figures given for the counties of Essex, Hudson and Passaic are believed to approximate the true birth-rate of these districts, and the reason for the comparatively full returns from these localities is doubtless to be found in the official energy and better executive ability of the local registrars of vital statistics of the counties named. In certain other municipalities and townships of the State the returns are carefully and satisfactorily collected, but, when considered by counties, the remainder of the State does not furnish returns of births which can be relied upon.

Marriages.—The number of marriages recorded during the year ending June 30th, 1901, was 15,857. The following table shows a considerable increase in the number of marriages during the past three years, coincident with the prosperous condition of business throughout the State. The large number of marriages reported during the years 1886–1897 was due to the unrestricted authority contained in the laws for the performance of the marriage ceremony in the case of non-residents, and the marked decrease in marriages which occurred in 1898 was directly consequent upon the enactment of the law requiring a license in cases where both parties are non-residents of the State.

TABLE 2.—SHOWING THE NUMBER OF MARRIAGES RECORDED IN NEW JERSEY FOR THE TWENTY-THREE YEARS ENDING JUNE 30TH, 1901.

Year.....	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.
Marriages in New Jersey	7,096	7,936	8,109	8,837	9,166	8,968	8,989	12,351	15,416	16,025	15,726	15,564
Year.....	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
Marriages in New Jersey	15,306	16,082	17,178	16,245	15,873	18,370	18,171	13,213	13,386	14,611	15,857	

Deaths.—The number of deaths which occurred in New Jersey during the year ending June 30th, 1901, was 31,048, and the annual death-rate, based upon the estimated population for the year, was 16.12 per 1,000 inhabitants.

TABLE 3.—SHOWING MUNICIPALITIES IN NEW JERSEY HAVING OVER 5,000 INHABITANTS, AND SHOWING ALSO POPULATION, TOTAL DEATHS, DEATHS UNDER ONE YEAR, DEATHS UNDER FIVE YEARS, AND TOTAL DEATH-RATE PER 1,000 POPULATION, FOR THE YEAR ENDING JUNE 30TH, 1901.

NAMES OF MUNICIPALITIES.	Estimated population.	Total number of deaths for year ending June 30th, 1901.	Deaths under one year.	Deaths under five and over one year.	Death rate per 1,000 population.
Atlantic County—					
Atlantic City.....	29,740	522	82	57	17.55
Bergen County—					
Englewood.....	6,417	84	14	4	13.09
Hackensack.....	9,875	167	18	16	16.91
Burlington County—					
Burlington.....	7,392	133	14	8	17.99
Camden County—					
Camden.....	78,429	1,369	243	171	17.46
Gloucester City.....	6,963	185	25	5	26.57
Cumberland County—					
Bridgeton.....	14,037	207	31	15	14.75
Millville.....	10,606	140	17	10	13.20
Essex County—					
East Orange.....	22,222	221	26	22	9.95
Montclair.....	14,404	243	79	15	16.86
Newark.....	252,123	4,615	751	442	18.30
Orange.....	24,411	418	58	30	17.12
Hudson County—					
Bayonne.....	35,295	509	128	74	14.42
Harrison.....	10,781	229	55	21	21.24
Hoboken.....	60,420	1,164	179	117	19.27
Jersey City.....	211,177	3,970	660	436	18.80
Town of Union.....	15,557	223	37	38	14.33
Mercer County—					
Trenton.....	75,465	1,165	174	86	15.44
Middlesex County—					
New Brunswick.....	20,025	364	52	20	18.18
Perth Amboy.....	18,633	306	87	37	16.42
South Amboy.....	6,505	90	20	4	13.84
Monmouth County—					
Long Branch.....	9,180	188	26	11	20.48
Morris County—					
Dover.....	6,121	89	11	10	14.54
Morristown.....	11,462	210	14	11	18.32
Passaic County—					
Passaic.....	29,754	583	155	89	19.59
Paterson.....	106,736	1,816	335	160	17.01
Salem County—					
Salem City.....	5,811	83	14	5	14.28
Union County—					
Elizabeth.....	53,789	956	180	107	17.78
Plainfield.....	15,717	280	38	17	17.82
Rahway.....	7,935	112	19	6	14.11
Warren County—					
Phillipsburg.....	10,246	152	21	16	14.84
State.....	1,925,781	31,048	5,064	2,800	16.12

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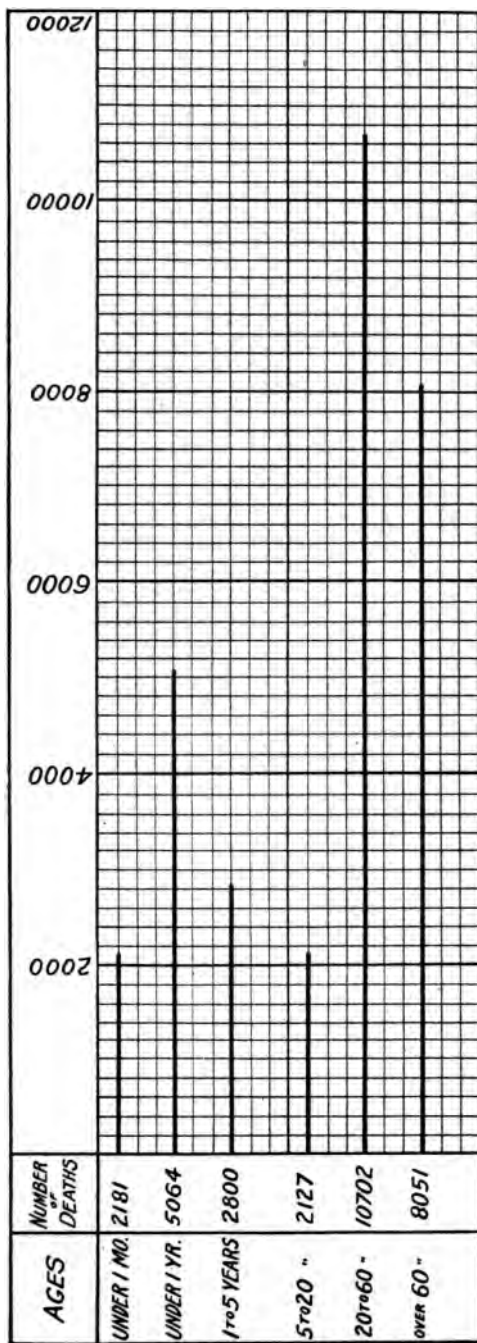
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**TABLE 4.—DEATHS AMONG CHILDREN UNDER FIVE YEARS OF AGE IN NEW JERSEY
PER 10,000 POPULATION FOR THE TWENTY-THREE YEARS ENDING JUNE
30TH, 1901.**

YEARS.	Population.	Number of deaths under five years	Deaths per 10,000 population among children under five years.
1879.....	1,020,584	7,919	77.49
*1880.....	1,130,892	7,407	65.49
1881.....	1,160,275	7,617	65.64
1882.....	1,189,658	10,512	88.36
1883.....	1,209,048	8,710	72.40
1884.....	1,248,224	7,971	63.85
*1885.....	1,278,033	9,120	71.35
1886.....	1,310,431	8,537	65.14
1887.....	1,342,829	9,245	68.84
1888.....	1,375,227	10,508	76.40
1889.....	1,407,642	10,354	73.55
*1890.....	1,441,017	10,748	74.58
1891.....	1,478,784	10,685	72.25
1892.....	1,511,653	12,369	81.82
1893.....	1,538,799	11,307	73.54
1894.....	1,578,373	9,264	58.69
*1895.....	1,679,942	9,074	54.23
1896.....	1,718,543	8,504	56.11
1897.....	1,764,144	9,643	48.21
1898.....	1,810,008	7,283	40.23
1899.....	1,855,872	10,357	56.30
*1900.....	1,883,669	10,453	55.11
1901.....	1,925,781	10,045	52.16

* Census year.

CHART SHOWING DEATHS IN NEW JERSEY, FROM ALL CAUSES BY AGES, FOR THE YEAR ENDING JUNE 30TH, 1901.



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TABLE 5.—DEATHS IN NEW JERSEY, PER 10,000 POPULATION, FROM THE CLASSIFIED CAUSES FOR THE TWENTY-THREE YEARS ENDING JUNE 30TH, 1901.

CAUSES OF DEATH.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.
Remittent fever	2.62	2.59	3.71	3.10	2.39	1.84	1.62	1.85	1.61	1.91	1.44
Enteric or typhoid	3.17	3.29	4.94	7.43	4.66	5.12	5.02	4.15	3.83	4.50	5.14
Small-pox .....	.18	2.18	3.08	.44	.56	.01	.03	.03	.03	.03	.02
Scarlet fever	6.14	5.06	4.80	10.09	7.05	4.88	5.05	1.69	1.89	4.17	3.78
Measles .....	.75	.76	.60	.73	1.08	1.51	1.05	.67	2.20	.58	.83
Whooping cough	2.71	1.14	1.02	2.12	1.56	.92	.41	2.09	1.34	1.17	1.97
Diphtheria and croup	10.86	7.71	9.72	12.37	9.47	8.21	11.70	9.94	11.37	14.80	11.18
Erysipelas	1.34	.95	1.06	.79	.74	.61	.57	.60	.71	.93	.80
Diarrhoeal diseases of children	18.11	19.15	19.43	15.06	21.96	19.72	22.25	20.32	20.16	25.50	23.99
Consumption	27.31	23.99	25.76	29.21	25.81	25.75	25.97	24.45	27.20	24.41	24.50
Acute lung diseases	21.16	17.57	17.30	23.18	22.79	17.41	20.07	17.55	19.04	21.74	20.38
Brain and nervous diseases of children	16.13	14.48	14.15	16.80	13.92	12.80	14.01	13.53	14.04	14.33	13.66
Diseases of heart and circulation	9.52	8.68	10.45	9.92	10.21	10.60	11.75	11.49	11.39	12.29	12.68
Renal and cystic diseases	5.46	4.56	5.24	6.48	6.27	7.14	7.34	7.06	6.50	7.41	7.50
Adult brain and spinal diseases	12.87	11.91	12.94	12.78	12.91	13.35	14.82	14.74	13.64	15.23	14.14
Digestive and intestinal diseases	10.20	8.88	9.30	6.22	7.63	8.62	8.91	9.25	9.24	10.73	10.30
Cancer	8.70	3.75	3.88	3.37	3.81	3.87	3.89	4.15	4.21	4.45	4.11
Acute rheumatism .....	.74	.56	.76	.43	.27	.49	.28	.51	.98	.10	.83
Puerperal	1.90	2.15	2.61	2.05	1.63	1.77	2.09	1.98	1.95	1.97	1.80
Violent deaths	*	*	*	6.66	7.50	*	6.59	7.60	7.82	9.59	7.65

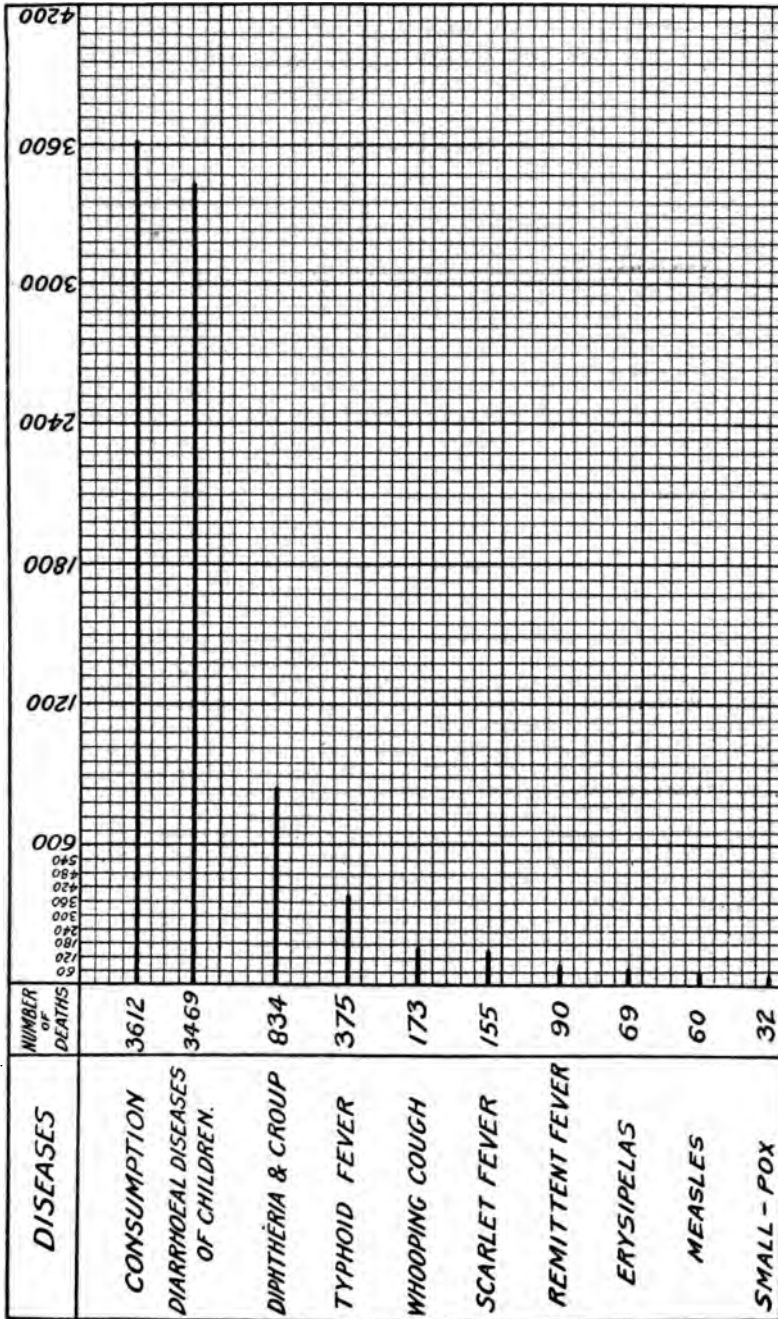
CAUSES OF DEATH.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
Remittent fever	1.85	1.21	1.30	.96	1.02	.85	1.69	1.74	.45	.52	.40	.46
Enteric or typhoid	5.42	4.69	4.15	3.23	3.07	3.39	3.85	2.70	2.48	2.62	1.87	1.95
Small-pox .....	.25	.27	.06	.13	.01	.01	.01	.01	.01	.01	.01	.17
Scarlet fever	1.45	1.94	6.66	2.89	1.73	1.57	1.06	1.15	1.11	1.01	1.15	.80
Measles	1.20	1.69	1.30	.47	1.62	.56	2.26	.88	1.07	.52	1.21	.81
Whooping cough	2.57	2.02	1.07	1.54	2.07	1.62	1.60	1.81	.85	1.52	1.61	.90
Diphtheria and croup	10.92	11.74	11.74	10.89	8.19	8.75	10.22	7.83	5.24	4.19	4.87	4.33
Erysipelas .....	.56	.57	.62	.45	.61	.44	.43	.38	.32	.17	.58	.35
Diarrhoeal diseases of children	24.47	21.57	26.74	25.37	24.66	22.39	22.15	19.55	16.31	19.23	15.83	18.01
Consumption	24.46	23.37	23.64	22.28	21.77	21.17	19.53	18.34	17.81	19.31	18.48	18.76
Acute lung diseases	26.39	27.73	34.31	25.82	26.50	27.49	24.12	22.89	18.86	23.29	25.21	22.00
Brain and nervous diseases of children	14.10	13.72	14.83	13.46	12.11	11.50	11.74	10.25	9.06	10.53	9.29	8.74
Diseases of heart and circulation	13.49	13.25	14.44	14.16	12.74	13.55	14.03	14.52	12.62	14.72	14.99	14.59
Renal and cystic diseases	7.97	8.11	9.55	9.36	9.16	9.10	9.21	9.92	9.35	10.37	10.90	11.03
Adult brain and spinal diseases	16.01	15.77	15.25	16.96	15.28	15.69	15.18	14.63	14.91	15.31	15.49	15.30
Digestive and intestinal diseases	10.55	10.63	10.74	11.39	9.92	9.49	9.43	8.91	8.19	8.38	9.47	8.73
Cancer	4.41	4.34	4.55	4.69	4.63	4.60	4.71	4.83	4.70	5.10	4.84	5.20
Acute rheumatism .....	.73	.51	.68	.66	.57	.49	.34	.89	.30	.39	.38	.29
Puerperal	1.73	2.00	1.86	1.83	1.85	1.75	1.61	1.57	1.45	1.44	1.51	1.40
Violent deaths	8.57	9.23	9.43	9.99	9.50	8.78	8.29	9.55	8.01	9.29	9.00	9.52

* Violent deaths are not separately recorded.

TABLE 6.—SHOWING AVERAGE NUMBER OF DEATHS FOR EACH OF THE CLASSIFIED DISEASES FOR TWENTY-THREE YEARS, AND ALSO THE INCREASE OR DECREASE OF DEATHS FROM EACH OF THE CLASSIFIED DISEASES OBTAINED BY COMPARING DEATHS IN 1900 WITH DEATHS IN 1901.

CLASSIFIED DISEASES.	Average deaths for twenty-three years, 1879-1901.	Deaths for year end- ing June 30th, 1900.		Increase and diminution for year ending June 30th, 1901.
		Deaths for year end- ing June 30th, 1900.	Deaths for year end- ing June 30th, 1901.	
Remittent fever.....	202	84	90	+ 6
Enteric or typhoid fever	556	356	375	+ 19
Small-pox.....	38	5	32	+ 27
Scarlet fever.....	447	220	155	- 65
Measles.....	158	231	60	-171
Whooping cough.....	232	306	173	-133
Diphtheria and croup.....	1,340	927	834	- 93
Erysipelas.....	811	111	69	- 42
Diarrhoeal diseases of children.....	3,127	3,010	3,469	+459
Consumption.....	3,344	3,514	3,612	+ 98
Acute lung diseases.....	3,384	4,795	4,237	-558
Brain and nervous diseases of children.....	1,861	1,767	1,684	- 83
Diseases of heart and circulation.....	1,876	2,852	2,810	- 42
Renal and cystic diseases.....	1,229	2,073	2,133	+ 60
Adult brain and spinal diseases.....	2,181	2,946	2,947	+ 1
Adult digestive and intestinal diseases	1,375	1,700	1,682	- 18
Cancer.....	652	921	1,001	+ 80
Acute rheumatism.....	79	73	55	- 18
Puerperal	264	288	269	- 19

CHART SHOWING COMPARATIVE MORTALITY FROM TEN SELECTED PREVENTABLE DISEASES FOR THE YEAR ENDING JUNE 30TH, 1901.



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TABLE 7.—DEATHS IN NEW JERSEY FROM SIX SELECTED DISEASES FOR YEAR ENDING JUNE 30TH, 1901, ARRANGED IN ORDER OF GREATEST FREQUENCY.

NAME OF DISEASE	Number of deaths.
Diarrhoeal diseases of children.....	3,469
Diphtheria	834
Typhoid fever..	375
Whooping cough..	173
Scarlet fever.....	155
Measles	60

TABLE 8.—DEATHS FROM CERTAIN SPECIFIED DISEASES FOR THE TWENTY-THREE YEARS ENDING JUNE 30TH, 1901, ARRANGED IN ORDER OF GREATEST FREQUENCY.

NAME OF DISEASE.	Number of deaths.
Acute lung.....	78,043
Consumption.....	76,921
Diarrhoeal diseases of children.....	70,911
Adult brain and spinal diseases.....	49,964
Diseases of heart and circulation.....	43,140
Brain and nervous diseases of children.....	42,699
Digestive and intestinal diseases.....	31,627
Diphtheria and croup	30,823
Renal and cystic diseases.....	27,376
Violent deaths.....	25,278
Cancer.....	14,992
Typhoid fever	12,598
Scarlet fever	10,270
Puerperal	6,063
Whooping cough	5,341
Remittent fever.....	4,657
Measles	3,645
Erysipelas	2,093
Acute rheumatism.....	1,782
Small-pox.....	880

TABLE 9.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FOR THE YEAR ENDING JUNE 30TH, 1901, FROM TEN SELECTED PREVENTABLE DISEASES, WITH PERCENTAGE OF TOTAL MORTALITY.

NAME OF DISEASE.	Small-pox.	Measles.	Erysipelas.	Malarial fevers.	Scarlet fever.	Whooping cough.	Typhoid fever.	Diphtheria.	Diarrhoeal diseases of children.	Consumption.
Deaths	32	60	69	90	155	173	375	834	3,469	3,612
Percentage of mortality.....	.10	.19	.22	.28	.49	.55	1.21	2.69	11.17	11.63

Consumption.—The number of deaths recorded as being due to consumption during the statistical year ending June 30th, 1901, was 3,612. The following tables show the comparative mortality of this disease during the past twenty-three years. The chart exhibits the diminishing death-rate from this disease.

14 REPORT OF THE BOARD OF HEALTH.

TABLE 10.—SHOWING DEATHS AND DEATH-RATES FROM CONSUMPTION IN NEW JERSEY, BY COUNTIES AND CITIES, PER 10,000 POPULATION, FOR YEAR ENDING JUNE 30TH, 1901.

NAMES OF COUNTIES AND CITIES.	Estimated population.	Number of deaths from consumption.	Number of deaths from consumption per 10,000 population.
Atlantic County	48,732	71	14.57
Atlantic City	29,740	46	15.47
Bergen County	81,079	98	12.09
Englewood	6,417	9	14.03
Hackensack	9,875	11	11.14
Burlington County	58,241	89	15.28
Burlington City	7,392	14	18.94
Camden County	109,151	202	18.51
Camden City	78,429	136	17.34
Gloucester City	6,963	23	33.03
Cape May County	13,270	15	11.30
Cumberland County	51,469	64	12.43
Bridgeton	14,037	19	13.54
Millville	10,606	13	12.26
Essex County	368,464	809	21.96
East Orange	22,222	21	9.45
Montclair	14,404	12	8.54
Newark	252,123	637	25.27
Orange	24,411	66	27.04
Gloucester County	32,048	56	17.47
Hudson County	397,642	939	23.61
Bayonne	35,295	50	14.17
Harrison	10,781	23	18.55
Hoboken	60,420	179	29.62
Jersey City	211,177	536	25.38
Town of Union	15,557	20	12.86
Hunterdon County	34,507	47	13.63
Mercer County	97,330	178	18.29
Trenton	75,465	148	19.61
Middlesex County	81,703	129	15.79
New Brunswick	20,025	36	17.98
Perth Amboy	18,633	24	12.88
South Amboy	6,505	12	18.45
Monmouth County	83,360	134	16.07
Long Branch	9,180	14	15.25
Morris County	66,280	97	14.63
Dover	6,121	10	16.34
Morristown	11,462	29	25.30
Ocean County	19,949	33	16.54
Passaic County	159,597	301	18.86
Passaic	29,754	38	12.77
Paterson	106,736	245	20.02
Salem County	25,419	52	20.46
Salem City	5,811	15	25.81
Somerset County	33,448	48	14.35
Sussex County	24,444	19	7.77
Union County	102,143	187	18.31
Elizabeth	53,789	115	21.38
Plainfield	15,717	26	16.54
Rahway	7,935	10	12.60
Warren County	37,881	44	11.62
Phillipsburg	10,246	13	12.68

SECRETARY'S REPORT.

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TABLE 11.—SHOWING DEATHS PER 10,000 POPULATION FROM CONSUMPTION IN NEW JERSEY FOR THE TWENTY-THREE YEARS ENDING JUNE 30TH, 1901.

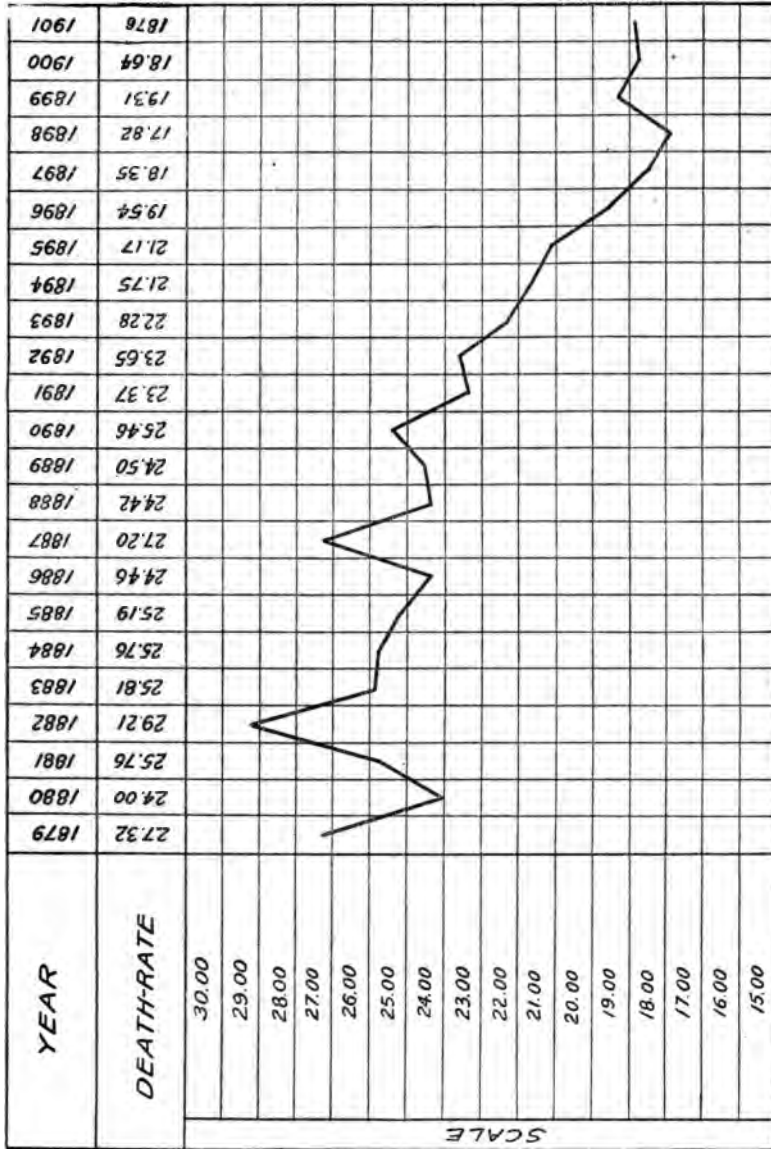
YEARS.	Population.*	Number of deaths from consumption	Deaths from consumption per 1,000 population.
1879.....	1,020,584	2,788	27.32
1880.....	1,130,892	2,714	24.00
1881.....	1,160,275	2,989	25.76
1882.....	1,189,658	3,475	29.21
1883.....	1,209,048	3,121	25.81
1884.....	1,248,224	3,215	25.76
1885.....	1,278,033	3,320	25.19
1886.....	1,310,431	3,205	24.46
1887.....	1,342,829	3,653	27.20
1888.....	1,375,227	3,358	24.42
1889.....	1,407,625	3,449	24.50
1890.....	1,441,017	3,669	25.46
1891.....	1,478,784	3,456	23.37
1892.....	1,511,653	3,575	23.65
1893.....	1,538,799	3,429	22.28
1894.....	1,578,373	3,433	21.75
1895.....	1,672,942	3,542	21.17
1896.....	1,718,543	3,358	19.54
1897.....	1,764,144	3,237	18.35
1898.....	1,810,008	3,225	17.82
1899.....	1,855,872	3,584	19.31
1900.....	1,883,669	3,514	18.64
1901.....	1,925,781	3,612	18.76

*Population estimated except for census years.

TABLE 12.—SHOWING THE PROPORTION OF DEATHS FROM CONSUMPTION TO TOTAL DEATHS DURING THE TWENTY-THREE YEARS ENDING JUNE 30TH, 1901.

YEARS.	Total deaths in New Jersey.	Deaths from consumption.	Proportion of deaths from consumption to total deaths.
1879.....	20,444	2,788	13.64
1880.....	18,967	2,714	14.30
1881.....	20,810	2,989	14.36
1882.....	25,910	3,475	13.41
1883.....	23,310	3,121	13.39
1884.....	21,716	3,215	14.80
1885.....	23,807	3,320	13.94
1886.....	22,734	3,205	14.10
1887.....	24,331	3,653	15.01
1888.....	27,173	3,358	12.44
1889.....	26,543	3,449	12.99
1890.....	28,530	3,669	12.96
1891.....	28,840	3,456	11.98
1892.....	32,685	3,575	10.94
1893.....	30,596	3,429	11.21
1894.....	30,004	3,433	11.44
1895.....	30,634	3,542	11.56
1896.....	30,767	3,358	10.92
1897.....	29,822	3,237	10.85
1898.....	27,337	3,225	11.79
1899.....	30,999	3,584	11.56
1900.....	31,474	3,514	11.17
1901.....	31,048	3,612	11.63

CHART SHOWING DEATHS FROM CONSUMPTION IN NEW JERSEY PER 10,000 POPULATION, FOR THE TWENTY-THREE YEARS ENDING JUNE 30TH, 1901.



18 REPORT OF THE BOARD OF HEALTH.

Following is a copy of a bill (Senate 45) which was introduced during the legislative session of 1901, but which failed to become a law. The advantages of institutional education of the patient for the arrest of incipient cases of phthisis is recognized by every member of the medical profession, and the effort to secure an institution, under State supervision, where the patient can be instructed concerning the methods whereby his own recovery may be effected, and concerning the measures which should be taken by every consumptive to prevent the infection of other persons, will doubtless be renewed from time to time until this most desirable end shall be attained :

AN ACT to establish a sanatorium for the treatment of tubercular diseases, and to provide for the erection, government and maintenance thereof.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey :

1. The governor, with the advice and consent of the senate, shall appoint six persons, who shall constitute the board of trustees of the New Jersey sanatorium for tubercular patients, and who shall hold office for the terms of one, two, three, four, five and six years respectively, beginning with the first day of April in the present year, and until their respective successors are appointed and qualified ; and previous to the first day of April in each year thereafter the governor shall, in like manner, appoint one such trustee, to hold office for the term of six years, beginning with the first day of April in the year of his appointment, and until his successor is appointed and qualified ; any such trustee may be removed by the governor for such cause as he may deem sufficient and as shall be assigned in the order of removal ; any vacancy occurring in said board shall be filled in like manner for the unexpired term ; the said board of trustees shall serve without compensation, and shall immediately organize by electing a president, secretary and treasurer.

2. The lands held by said trustees in trust for the state, for the use of said sanatorium, as hereinafter provided, shall not be taken for street, highway or railroad without leave of the legislature specially obtained.

3. As soon as may be, after organization, said board of trustees shall procure offers of sites for the location of said sanatorium, with the prices thereof, and shall procure plans for the said sanatorium building or buildings to be made, with estimates of the cost thereof, necessary to properly fit said buildings or building for the purposes of said sanatorium, and report the same to the governor with their recommendation thereon, and upon his approval, are authorized to enter into contracts for the purchase of such site, and the erection and equipment of said sanatorium ; *provided, however*, that the expenditure for carrying out the purposes of this act shall not exceed fifty thousand dollars.

4. No member of the board of trustees shall be directly or indirectly interested in any contract in connection with said sanatorium, or with the furnishing of supplies for said sanatorium, and the violation of this section shall be a misdemeanor.

5. The board of trustees shall not order the expenditure of any money, or make any contract or contracts except by a majority vote of all its members, which vote shall be taken by ayes and nays and entered on the minutes of said board of trustees.

6. Said board of trustees shall have the general direction and control of all the

property and concerns of said sanatorium, not otherwise provided by law, and shall take charge of the general interests of said sanatorium, and see that the objects and designs thereof are carried into effect, and everything done faithfully according to the requirements of the legislature and the by-laws, rules and regulations of said sanatorium.

7. The said board of trustees shall make rules and regulations for the government of said sanatorium; they shall make all needful by-laws, rules and regulations for the government of the proceedings of said board of trustees, and shall fix the terms for care and board upon which all persons who are able to pay their board shall be admitted to said sanatorium; but no person shall be refused admission to said sanatorium because of his or her inability to pay; they shall appoint all medical directors and assistant physicians, employes, nurses and servants and fix their compensation; all rules and regulations made by said board of trustees in pursuance of this section shall be made subject to the approval of the governor.

8. Said board of trustees shall have authority to recover for the use of said sanatorium, any and all sums which may be due upon any note or bond in their hands belonging thereto; also, any and all sums which may be charged and due, according to the by-laws, for the support of any patient therein, or who may have been therein, in which action the declaration may be in a general indebitatus assumpsit, and judgment shall be rendered for such as may be found due, with interest from the time of the demand made by the treasurer of such payment; said board of trustees may also, upon the receipt of the money due upon any mortgage belonging to said sanatorium, execute and acknowledge, or cause to be executed and acknowledged, a release thereof, so that the same may be discharged of record.

9. It shall be the duty of said board of trustees to visit said sanatorium at least twice in each year, and to inspect said sanatorium and management, and to make, in their annual report, such recommendations as they may deem necessary concerning said sanatorium.

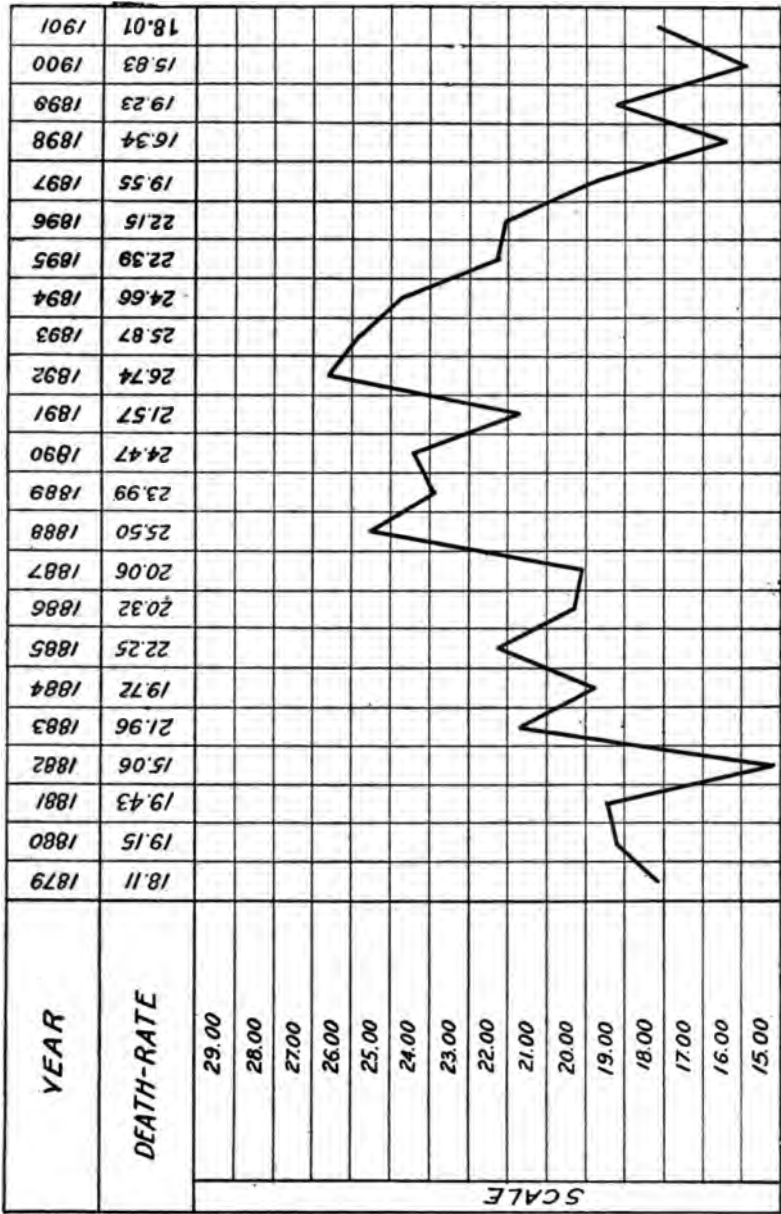
10. This act shall take effect immediately.

Diarrhoeal Diseases of Children.—The death-rate among children from intestinal causes has not increased, and the prevailing opinion among practitioners of medicine seems to be further sustained by the continued low mortality from this cause during the past year. There is abundant reason to believe that the marked decrease in the number of deaths among children under five years of age, which has occurred within the last seven years, has been largely due to the more cleanly methods which have been employed in the collection and preparation of milk.

TABLE 13.—SHOWING DEATHS AND DEATH-RATES FROM DIARRHOEAL DISEASES OF CHILDREN IN COUNTIES AND IN CITIES OF NEW JERSEY, OF OVER 5,000 POPULATION, FOR THE YEAR ENDING JUNE 30TH, 1901.

NAMES OF COUNTIES AND CITIES.	Estimated population.	Deaths from diarrhoeal diseases of children, exclusive of cities of over 5,000.	Death rate per 10,000 population, exclusive of cities of over 5,000.	Deaths from diarrhoeal diseases of children in the cities of over 5,000.	Death rate per 10,000 population in cities of over 5,000.
Atlantic County.....	48,732	94	19.29		
Atlantic City.....	29,740			67	22.53
Bergen County.....	81,079	146	18.01		
Englewood.....	6,417			9	14.03
Hackensack.....	9,875			14	14.18
Burlington County.....	58,241	82	14.08		
Burlington City.....	7,392			11	14.88
Camden County.....	109,151	202	18.51		
Camden.....	78,429			155	19.76
Gloucester City.....	6,963			16	22.98
Cape May County.....	13,270	24	18.01		
Cumberland County.....	51,469	71	13.79		
Bridgeton.....	14,037			27	19.23
Millville.....	10,606			14	13.20
Essex County.....	368,464	622	16.88		
East Orange.....	22,222			19	8.55
Montclair.....	14,404			49	34.02
Newark.....	252,123			431	17.09
Orange.....	24,411			42	17.21
Gloucester County.....	32,048	29	9.05		
Hudson County.....	397,642	847	21.30		
Bayonne.....	35,295			84	23.80
Harrison.....	10,781			34	31.54
Hoboken.....	60,420			125	20.69
Jersey City.....	211,177			410	19.41
Town of Union.....	15,557			26	16.71
Hunterdon County.....	34,507	24	6.96		
Mercer County.....	97,330	116	11.92		
Trenton.....	75,465			100	13.25
Middlesex County.....	81,703	169	20.68		
New Brunswick.....	20,025			37	18.48
Perth Amboy.....	18,633			64	34.35
South Amboy.....	6,505			8	12.30
Monmouth County.....	83,360	184	22.07		
Long Branch.....	9,180			24	26.14
Morris County.....	66,280	81	12.22		
Dover.....	6,121			5	8.17
Morristown.....	11,462			16	13.96
Ocean County.....	19,949	27	13.53		
Passaic County.....	159,597	401	25.13		
Passaic.....	29,754			123	41.34
Paterson.....	106,736			246	23.05
Salem County.....	25,419	39	15.34		
Salem City.....	5,811			10	17.21
Somerset County.....	33,448	36	10.76		
Sussex County.....	24,444	26	10.64		
Union County.....	102,143	197	19.29		
Elizabeth.....	53,789			132	24.54
Plainfield.....	15,717			25	15.91
Rahway.....	7,935			8	10.08
Warren County.....	37,881	52	13.73		
Phillipsburg.....	10,246			23	22.45

CHART SHOWING DEATHS IN NEW JERSEY FROM DIARRHEAL DISEASES OF CHILDREN PER 10,000 INHABITANTS FOR THE TWENTY-THREE YEARS ENDING JUNE 30TH, 1901.



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Diphtheria.—The mortality from diphtheria has still further declined during the past year, and the records show that the number of deaths due to this disease was 834. This number is 93 less than the deaths which occurred from this affection during the preceding year, and 506 less than the average for twenty-three years.

TABLE 14.—DEATHS IN NEW JERSEY FROM DIPHTHERIA FOR THE THIRTEEN YEARS ENDING JUNE 30TH, 1901.

Years	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
Deaths from diphtheria.....	1,574	1,575	1,787	1,776	1,677	1,294	1,464	1,758	1,382	950	777	927	834

TABLE 15.—DEATHS FROM DIPHTHERIA IN THE CITIES OF OVER 5,000 POPULATION IN NEW JERSEY FOR THE THIRTEEN YEARS ENDING JUNE 30TH, 1901.

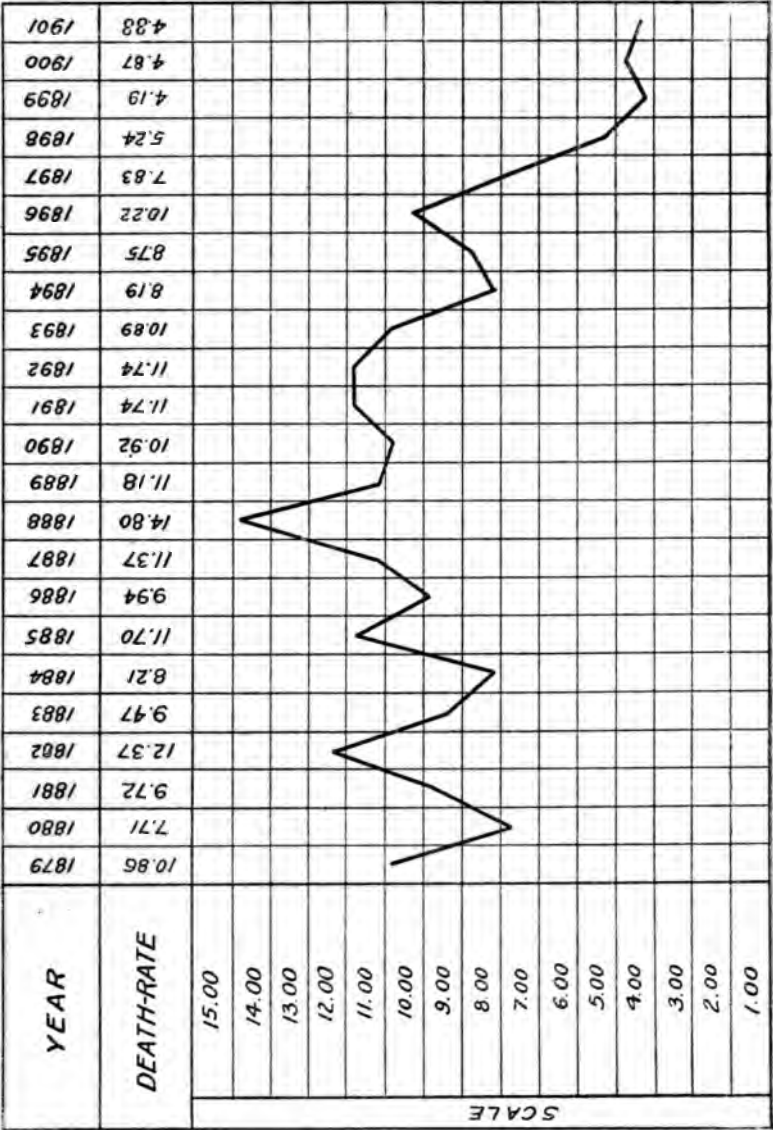
NAME OF PLACE.	Estimated population.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	Totals.
Atlantic City.....	29,740	8	4	15	8	8	8	7	11	8	5	7	15	11	115
Bayonne.....	35,295	59	10	14	16	13	13	15	52	14	13	8	15	15	257
Bridgeton.....	14,087	2	6	40	10	2	2	1	8	12	2	4	1	3	93
Burlington.....	7,392	4	3	10	19	11	16	9	24	5	7	.....	.....	.....	108
Camden.....	78,429	32	76	192	150	89	90	84	60	95	48	66	104	115	1,201
Dover*.....	6,121	.....	.....	.....	.....	.....	.....	.....	.....	5	4	1	1	4	15
East Orange†.....	22,222	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
Elizabeth.....	53,789	40	40	51	18	47	44	22	49	32	25	27	21	39	455
Englewood*.....	6,417	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	4
Gloucester.....	6,963	11	13	5	6	4	4	7	3	6	1	6	3	1	70
Hackensack.....	9,875	.....	.....	.....	.....	1	2	2	1	2	5	4	2	2	21
Harrison.....	10,781	28	3	10	8	6	7	8	15	4	6	4	11	1	111
Hoboken.....	60,420	162	126	98	70	77	56	95	103	53	45	46	33	34	993
Jersey City.....	211,177	228	341	295	261	221	272	187	299	229	156	102	119	123	2,828
Long Branch.....	9,180	4	9	6	2	4	4	2	9	7	2	.....	15	2	66
Millville.....	10,606	9	17	27	3	2	7	6	6	3	14	1	14	3	112
Montclair.....	14,404	.....	.....	.....	.....	.....	.....	.....	.....	9	2	8	4	2	33
Morristown.....	11,462	30	5	5	5	8	.....	9	6	1	4	1	.....	2	76
Newark.....	252,123	343	314	196	219	275	173	256	330	177	117	126	142	123	2,791
New Brunswick.....	20,025	50	23	5	29	7	11	17	23	9	10	6	2	5	197
Orange.....	24,411	22	44	41	39	23	11	15	47	18	29	15	11	5	320
Passaic.....	29,754	25	20	32	23	14	13	14	29	33	9	10	8	9	239
Paterson.....	106,736	78	68	161	142	95	151	85	125	177	68	86	101	43	1,381
Perth Amboy.....	18,633	8	6	29	12	22	20	11	4	18	16	13	9	11	179
Phillipsburg.....	10,246	12	7	2	8	11	2	10	6	19	5	2	1	4	89
Plainfield.....	15,717	3	12	4	5	33	14	14	4	1	7	2	2	3	104
Rahway.....	7,935	1	6	4	2	9	1	3	5	1	2	3	3	1	41
Salem.....	5,811	13	1	.....	1	6	2	2	15	11	18	8	3	1	81
South Amboy.....	6,505	.....	.....	.....	.....	.....	.....	.....	.....	34	5	3	5	1	48
Town of Union.....	15,557	27	44	53	12	17	13	25	1	7	8	7	8	18	249
Trenton.....	75,465	20	43	67	135	91	36	158	90	33	16	12	19	13	733
Total.....	1,187,228	1,214	1,241	1,357	1,203	1,097	972	1,065	1,343	1,017	656	574	681	597	13,015

*Record began 1897.

†Record began 1896.

‡East Orange was incorporated as a city in 1900.

CHART SHOWING DEATHS FROM DIPHTHERIA, PER 10,000 POPULATION IN NEW JERSEY, FOR THE TWENTY-THREE YEARS ENDING JUNE 30TH, 1901.



Typhoid Fever.—The number of deaths from typhoid fever has gradually decreased during the past eleven years, notwithstanding the steady increase in population. The deaths from this cause for the year ending June 30th, 1901, exceeded those for the preceding year by only 19, and the number for that year (1900) was smaller than for any similar period during the past twenty-one years. The number of deaths from this disease in the municipalities of the State was 288 (2.42 per 10,000 population), and in the districts outside of the limits of municipalities the number of deaths was 87 (1.18 per 10,000 population).

TABLE 16.—SHOWING DEATHS PER 10,000 POPULATION FROM TYPHOID FEVER IN NEW JERSEY FOR THE TWENTY-THREE YEARS ENDING JUNE 30TH, 1901.

YEAR.	Population.*	Number of deaths from typhoid fever.	Deaths from typhoid fever per 10,000 population.
1879	1,020,584	324	3.17
1880	1,180,892	373	3.29
1881	1,160,275	574	4.94
1882	1,189,658	884	7.43
1883	1,209,048	564	4.66
1884	1,248,224	640	5.12
1885	1,278,033	642	5.02
1886	1,310,431	545	4.15
1887	1,342,829	522	3.88
1888	1,375,227	620	4.50
1889	1,407,625	724	5.14
1890	1,441,017	782	5.42
1891	1,478,784	695	4.69
1892	1,511,653	628	4.15
1893	1,538,799	506	3.28
1894	1,578,373	485	3.07
1895	1,672,942	568	3.39
1896	1,718,543	577	3.35
1897	1,764,144	478	2.70
1898	1,810,008	450	2.48
1899	1,855,872	486	2.62
1900	1,883,669	356	1.87
1901	1,925,781	375	1.95

* Population estimated except for census years.

CHART SHOWING DEATHS FROM TYPHOID FEVER IN NEW JERSEY, PER 10,000 POPULATION, FOR THE TWENTY-THREE YEARS
ENDING JUNE 30TH, 1901.

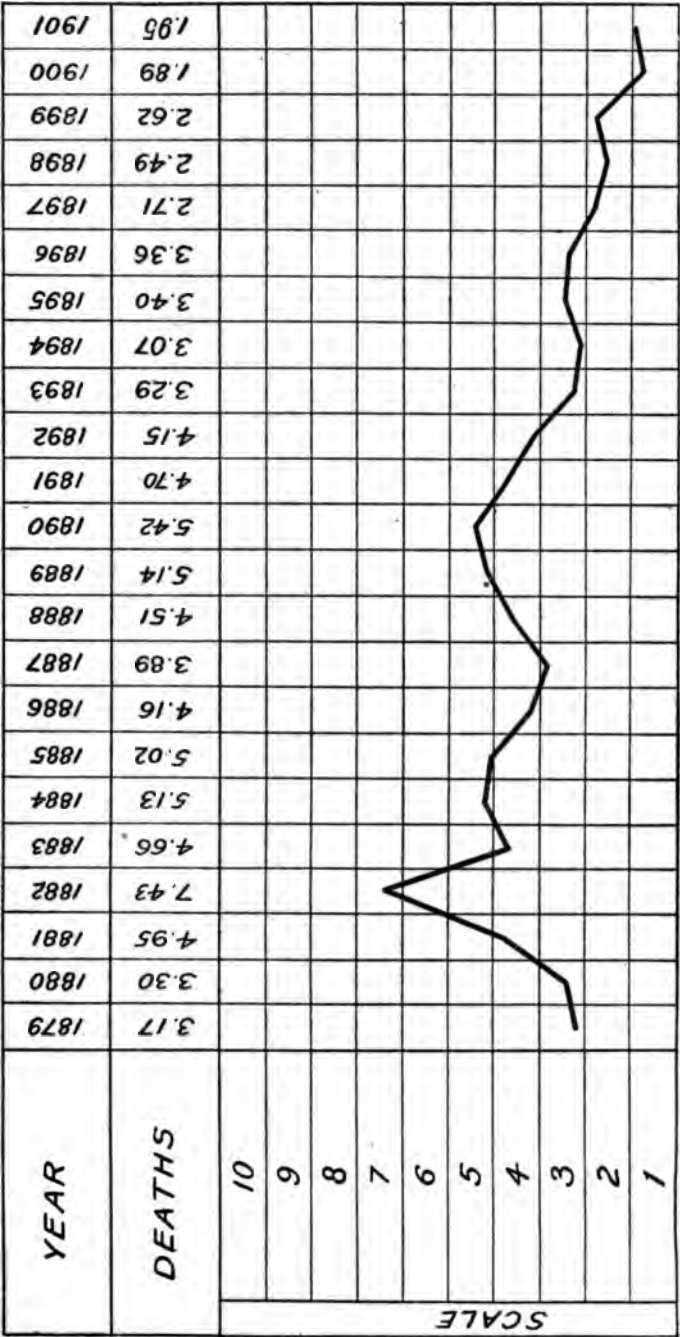


TABLE 17.—SANITARY DISTRICTS IN NEW JERSEY IN WHICH DEATHS FROM
TYPHOID FEVER OCCURRED DURING THE YEAR ENDING JUNE 30TH, 1901,
WITH POPULATION, NUMBER OF DEATHS, SOURCE OF WATER-SUPPLY AND
NATURE OF DRAINAGE.

NAME OF DISTRICT.	Population, 1900.	Number of deaths from typhoid fever.	Water-supply.	Drainage.
Allamuchy township.....	588	1	Domestic.....	No sewers.
Atlantic City	27,838	3	Public.....	Sewers.
Atlantic township (M)*.....	1,410	1	Domestic.....	No sewers.
Atlantic Highlands (borough)	1,383	1	"	"
Bayonne (city).....	32,722	8	Public	Sewers.
Beverly (city).....	1,950	2	"	"
Bloomfield (town)	9,668	1	"	"
Boonton (town)	3,901	1	"	No sewers.
Bordentown (city).....	4,110	2	"	Sewers.
Brick township.	2,130	1	Domestic.....	No sewers.
Bridgeton (city).....	13,913	5	Public.....	Sewers.
Bridgewater township.....	1,601	2	Domestic.....	No sewers.
Burlington (city).....	7,392	6	Public.....	Sewers.
Caldwell (borough.)	1,367	2	Domestic.....	No sewers.
Camden (city)	75,935	9	Public.....	Sewers.
Cape May (city).....	2,257	2	"	"
Centre township.....	2,192	3	Domestic.....	No sewers.
Chester township (B).....	4,420	2	"	"
Chester township (M).....	1,409	2	"	"
Cinnaminson township.....	1,078	1	"	"
Clinton township (E).....	1,325	1	"	"
Commercial township.....	2,982	1	"	"
Deal (borough)	70	1	"	"
Delaware township (C)	1,679	1	"	"
Deptford township.....	2,114	1	"	"
East Orange (city).....	21,506	3	Public.....	Sewers.
Eatontown township.....	3,021	1	Domestic.....	No Sewers.
Egg Harbor (city).....	1,808	1	Public.....	"
Egg Harbor township.....	1,863	1	Domestic.....	"
Elizabeth (city).....	52,130	7	Public.....	Sewers.
Elk township.....	997	1	Domestic.....	No sewers.
Englewood (city).....	6,253	3	Public.....	Sewers.
Fanwood township.....	1,200	2	Domestic.....	No sewers.
Franklin township (E)	3,682	1	"	"
Freehold (town).....	2,934	1	Public.....	Sewers.
Frenchtown (borough).....	1,020	1	"	No sewers.
Galloway township.....	2,469	1	Domestic.....	"
Garfield (borough).....	3,504	1	Public.....	"
Glassboro township.....	2,677	1	Domestic.....	"
Glen Rock (borough).....	613	1	"	"
Greenwich township (G).....	2,252	3	"	"
Hackensack (city)	9,443	3	Public.....	Sewers.
Hackettstown (town).....	2,474	1	"	No sewer.
Haddon township.....	2,012	3	Domestic.....	"
Haddonfield (borough).....	2,776	3	Public.....	Sewers.

* Letter in parentheses designates county.

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TABLE 17.—SANITARY DISTRICTS IN NEW JERSEY IN WHICH DEATHS FROM TYPHOID FEVER OCCURRED DURING THE YEAR ENDING JUNE 30TH, 1901, WITH POPULATION, NUMBER OF DEATHS, SOURCE OF WATER-SUPPLY AND NATURE OF DRAINAGE—*Continued.*

NAME OF DISTRICT.	Population 1900.	Number of deaths from typhoid fever.	Water-supply.	Drainage.
Hamilton township (M).....	4,164	1	Domestic.....	No sewers.
Hanover township.....	5,366	2	"	"
Harrison (town).....	10,596	6	Public.....	"
High Bridge township.....	1,877	1	Domestic.....	"
Hoboken (city).....	59,364	10	Public	Sewers.
Hopewell township (C).....	1,807	1	Domestic.....	No sewers.
Hopewell township (M).....	3,360	1	"	"
Howell township.....	3,103	2	"	"
Jersey City.....	206,433	42	Public.....	Sewers.
Kearny (town).....	10,896	3	"	"
Landis township.....	4,721	2	Domestic.....	No sewers.
Little Falls township.....	2,908	1	"	"
Lodi (borough).....	1,917	1	Public.....	"
Long Branch (commission).....	8,872	5	"	Sewers.
Lower township.....	1,141	1	Domestic.....	No sewers.
Madison (borough).....	3,754	1	Public.....	"
Madison township (M).....	1,671	1	Domestic.....	"
Mansfield township (B).....	1,518	1	"	"
Mansfield township (W)	1,324	1	"	"
Matawan (borough).....	1,511	1	"	"
Matawan township.....	1,310	2	"	"
Mantua township.....	2,101	2	"	"
Middletown township.....	5,479	2	"	"
Milltown (borough).....	561	1	"	"
Millville (city).....	10,583	2	Public.....	Sewers.
Montclair (city).....	13,962	3	"	"
Morristown (city).....	11,267	2	"	No sewers.
Neptune township.....	7,943	4	Domestic	"
Netcong (borough).....	941	2	"	"
Newark (city).....	246,070	59	Public.....	Sewers.
New Brunswick (city).....	20,006	6	"	"
New Hanover township.....	1,827	2	Domestic.....	No sewers.
Newton township.....	4,376	1	Public.....	"
Northampton township.....	5,168	2	"	"
North Bergen township.....	9,213	2	"	"
Ocean City (borough).....	1,307	1	"	Sewers.
Orange (city).....	24,141	5	"	"
Oxford township.....	3,095	1	Domestic	No sewers.
Palmyra township	2,300	1	"	"
Park Ridge (borough).....	870	1	Public.....	"
Passaic (city)	27,777	8	"	"
Paterson (city).....	105,171	24	"	"
Perth Amboy (city).....	17,699	2	"	"
Phillipsburg (city).....	10,052	3	"	"
Piscataway township	2,628	1	Domestic.....	"

TABLE 17.—SANITARY DISTRICTS IN NEW JERSEY IN WHICH DEATHS FROM TYPHOID FEVER OCCURRED DURING THE YEAR ENDING JUNE 30TH, 1901, WITH POPULATION, NUMBER OF DEATHS, SOURCE OF WATER-SUPPLY AND NATURE OF DRAINAGE—*Continued.*

NAME OF DISTRICT.	Population, 1900.	Number of deaths from typhoid fever.	Water-supply.	Drainage.
Plainfield (city)	15,369	7	Public	Sewers.
Rahway (city)	7,935	1	"	"
Raritan township (Mid.)	2,801	1	Domestic	No sewers.
Raritan township (Mon.)	1,524	3	"	"
Red Bank (borough)	5,428	2	Public	Sewers.
Rutherford (borough)	4,411	1	"	No sewers.
Sayreville township	4,155	1	Domestic	"
Shamong township	910	1	"	"
South Amboy (city)	6,349	1	Public	Sewers.
Stafford township	1,009	1	Domestic	No sewers.
Summit (city)	5,302	1	Public	"
Town of Union	15,187	1	"	Sewers.
Trenton (city)	73,307	14	"	"
Union township (B)	1,590	1	"	No sewers.
Vailsburg (borough)	2,779	1	"	"
Voorhees township	969	1	Domestic	"
Wall township	3,212	1	"	"
Warren township	1,008	1	"	"
Washington township (B)	617	1	"	"
Washington township (M)	1,157	1	"	"
Washington township (W)	1,249	1	"	"
Westfield township	4,328	2	Public	Sewers.
West Hoboken township	23,094	5	"	"
Winslow township	2,392	1	Domestic	No sewers.
Woodbridge township	7,631	1	"	"
Woodbury (city) ..	4,087	1	Public	Sewers.

Whooping Cough.—The number of deaths caused by whooping cough during the last statistical year was only 173, while for the two previous years the deaths from this affection was 306 and 282, respectively. But in this disease, as in measles, outbreaks appear to decline only when all of the susceptible individuals in a community have experienced an attack, and the recurrence of the disease as an epidemic, indicates that a non-immune group of persons has been introduced.

CHART SHOWING DEATHS FROM WHOOPING COUGH IN NEW JERSEY FOR THE TWENTY-THREE YEARS
ENDING JUNE 30TH, 1901.

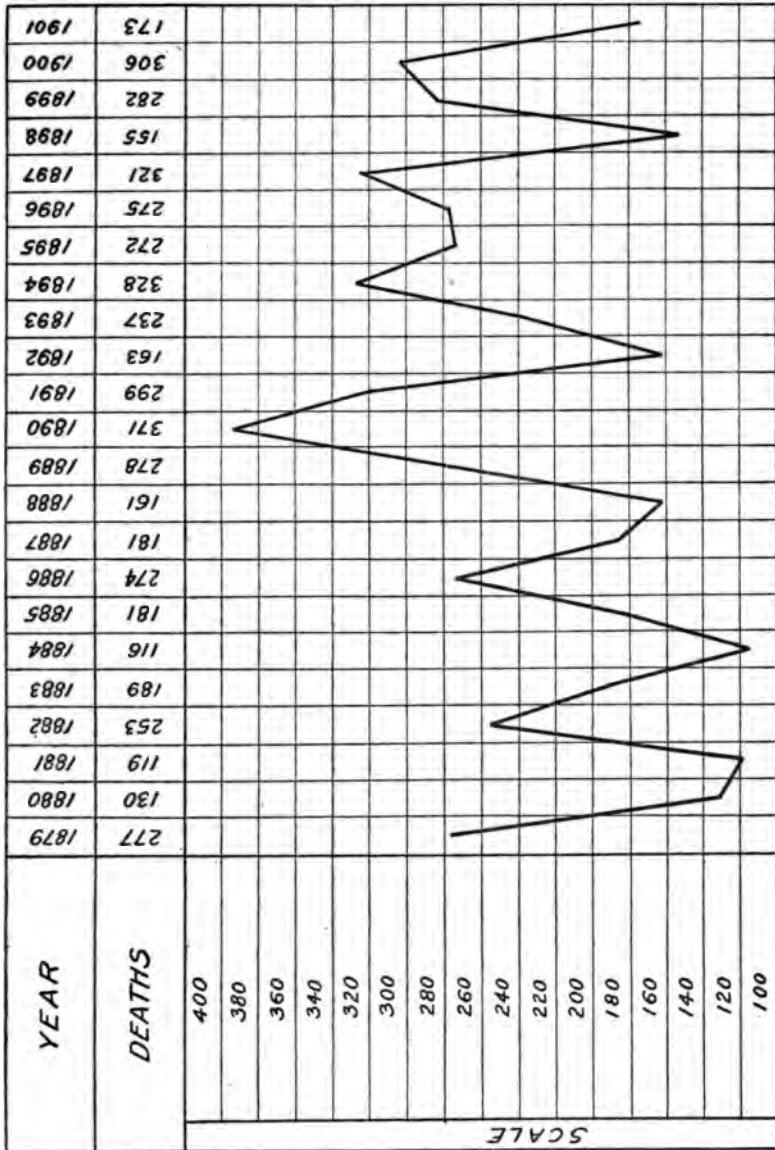
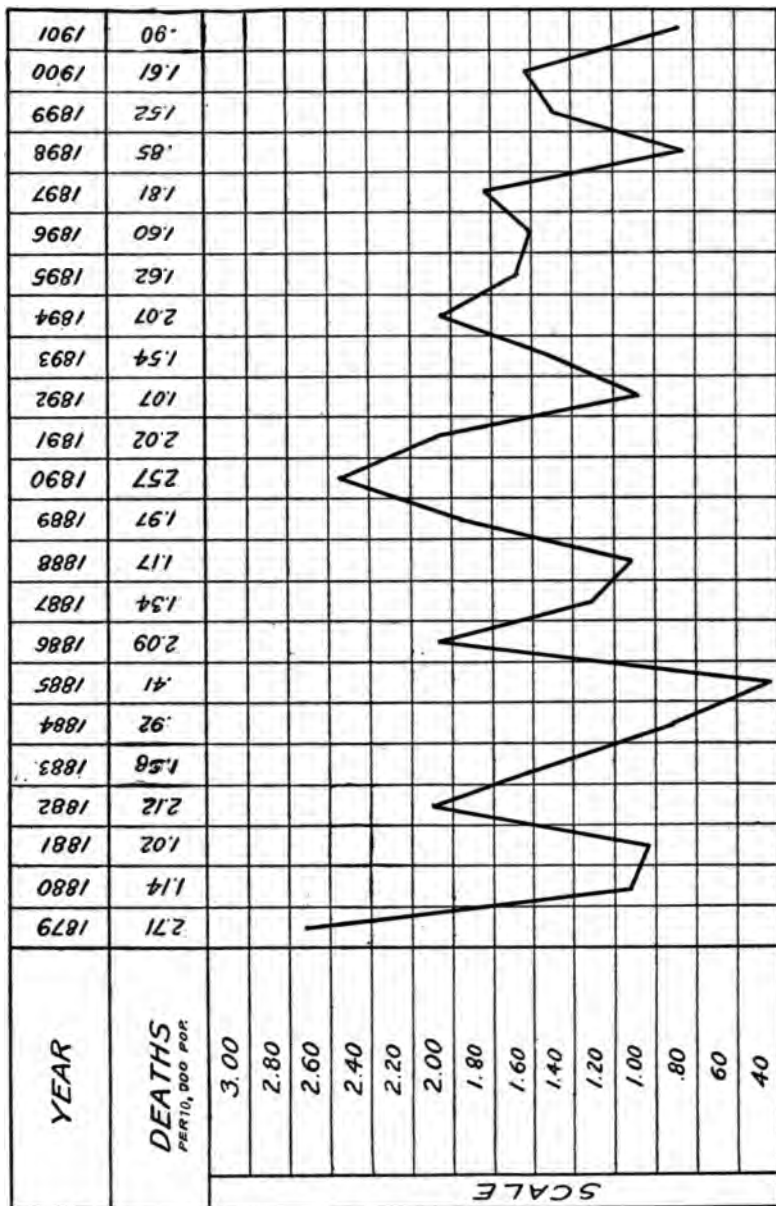


CHART SHOWING DEATHS FROM WHOOPING COUGH IN NEW JERSEY FOR THE TWENTY-THREE YEARS ENDING JUNE 30TH, 1901, PER 10,000 POPULATION.



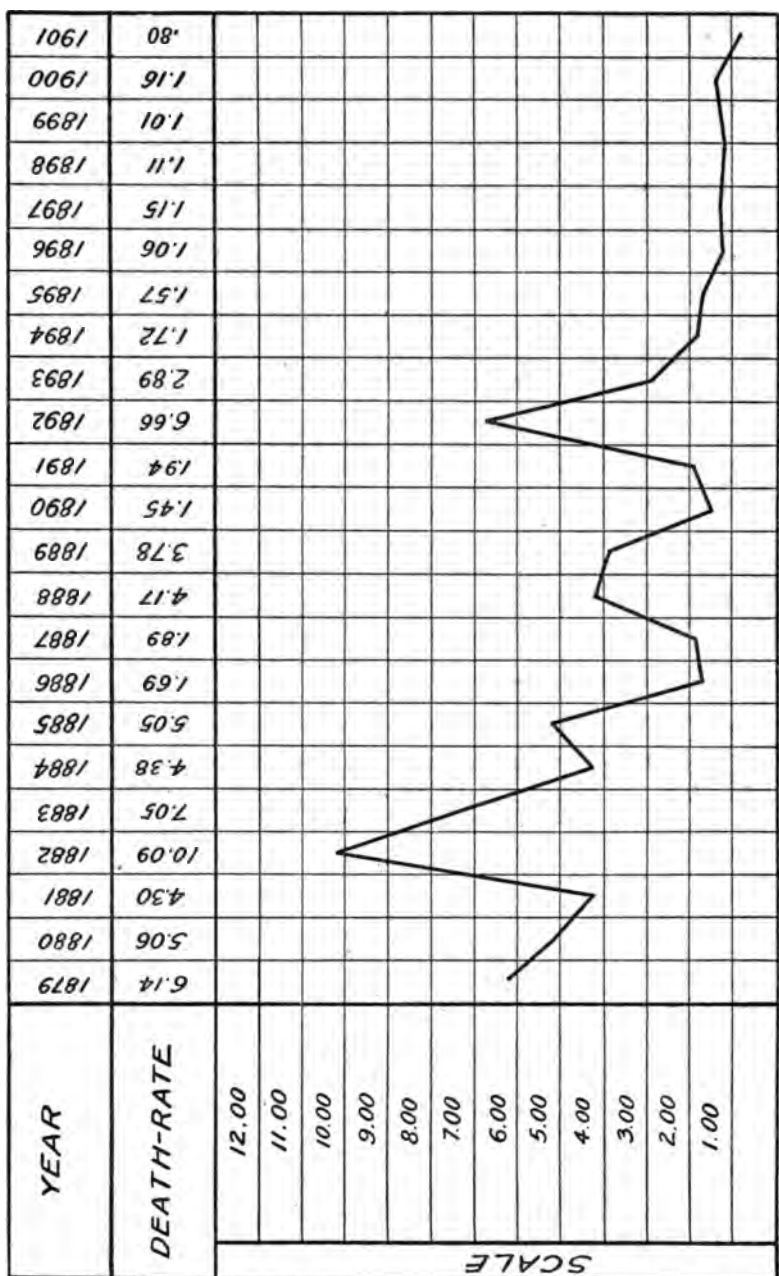
Scarlet Fever.—The number of deaths caused by scarlet fever during the past eight years has been remarkably small, and during the year ending June 30th, 1901, the death-rate per 10,000 population from this disease was much lower than during any previous year since the mortality records have been preserved in New Jersey. From notifications received, it appears that the number of cases of scarlet fever which occurred during the year was in excess of those which existed during the previous year; but, notwithstanding the increase in the prevalence of the disease, the number of deaths was 65 less than during the previous year, and 292 less than the average for the past twenty-three years.

TABLE 18.—SHOWING DEATHS IN NEW JERSEY FROM SCARLET FEVER FOR THE TWENTY-THREE YEARS ENDING JUNE 30TH, 1901.

Year.....	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.
Deaths from scarlet fever. } ...	627	578	499	1,306	853	547	646	222	255	574	533	202

Year.....	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
Deaths from scarlet fever. } ...	288	1,008	445	272	264	183	208	201	187	220	155

CHART SHOWING DEATHS FROM SCARLET FEVER, PER 10,000 POPULATION, IN NEW JERSEY FOR THE TWENTY-THREE YEARS
ENDING JUNE 30TH, 1901.



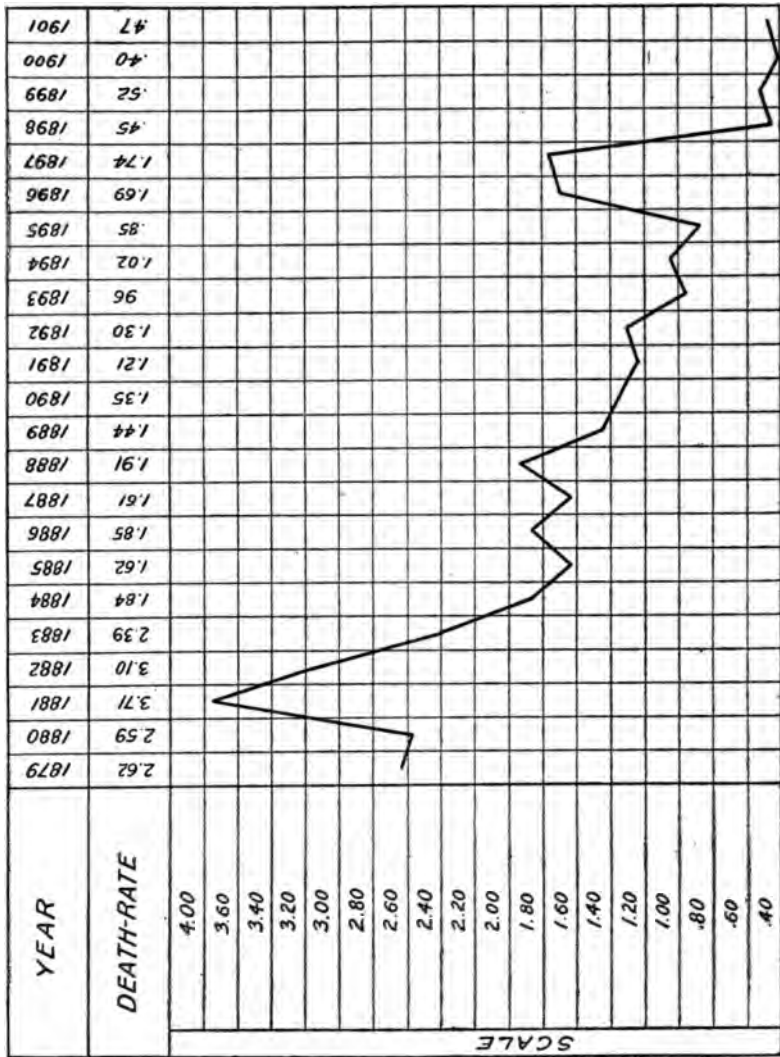
Malarial Fevers.—Increasing knowledge concerning the methods of dissemination of malarial affections has given new interest to all questions relating to their history so far as it has been recorded. The following table shows the number of deaths which have been reported as being caused by this group of affections in New Jersey, and the chart shows very clearly the progressive diminution in the mortality which has resulted from these diseases.

TABLE 19.—DEATHS FROM MALARIAL FEVERS IN NEW JERSEY FOR THE TWENTY-THREE YEARS ENDING JUNE 30, 1901.

Year.....	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.
Deaths from malarial fevers.....	268	298	431	379	290	280	209	243	217	264	268	195

Year.....	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
Deaths from malarial fevers.....	180	198	148	162	144	119	132	82	96	84	9

CHART SHOWING DEATHS FROM MALARIAL FEVERS, PER 10,000 POPULATION, IN NEW JERSEY FOR
THE TWENTY-THREE YEARS ENDING JUNE 30TH, 1901.



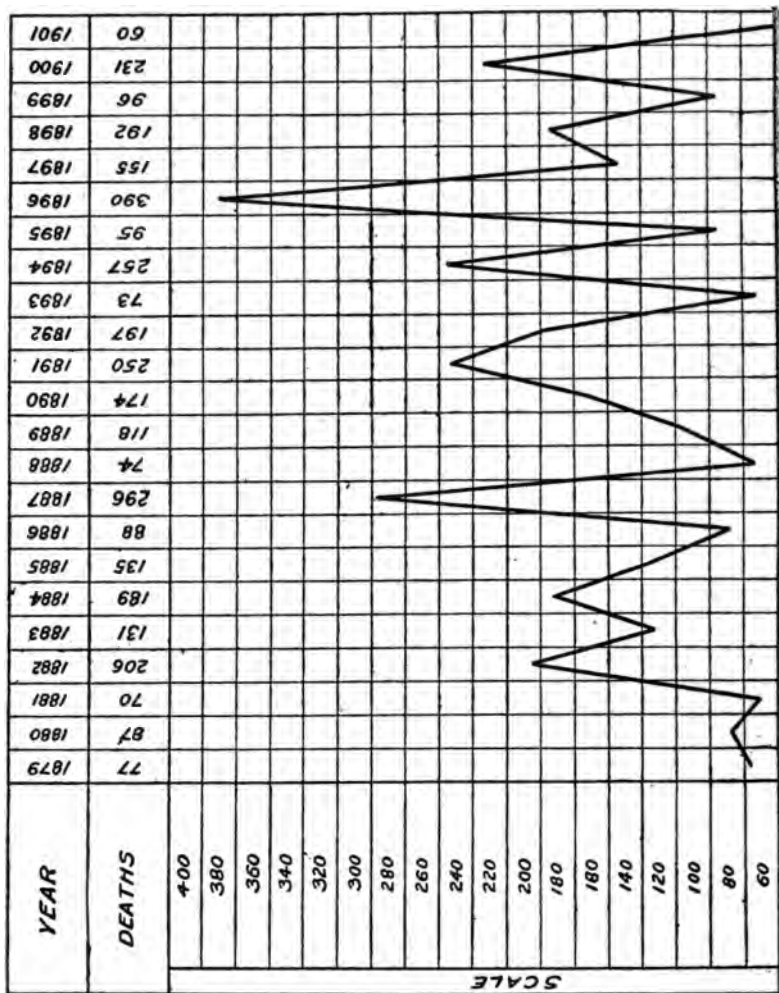
Measles.—The number of deaths caused by measles was smaller than during any previous statistical year since the records of vital facts have been preserved in New Jersey, only 60 having been reported.

TABLE 20.—SHOWING DEATHS IN NEW JERSEY FROM MEASLES FOR THE TWENTY-THREE YEARS ENDING JUNE 30TH, 1901.

Year.....	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.
Deaths from measles..... }	77	87	70	206	131	189	135	88	296	74	118	174

Year.....	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
Deaths from measles..... }	250	197	78	257	95	390	155	192	96	231	60

CHART SHOWING DEATHS IN NEW JERSEY FROM MEASLES, FOR THE TWENTY-THREE YEARS
ENDING JUNE 30TH, 1901.



Small-pox.—The number of cases of small-pox reported during the year ending June 30th, 1901, was 225, and the number of deaths was 5—a fatality of only 2.2 per cent. The small fatality is in accord with the experience which has been recorded in other States during the past five or six years. The rate of the occurrence of the cases of small-pox was, by quarters, as follows: July, August, September, 2; October, November, December, 13; January, February, March, 36; April, May, June, 174. New Jersey has been fortunate enough to escape with comparatively few cases of small-pox during the recent general prevalence of this disease in other portions of the United States, and this fact has doubtless been due to the intelligent, prompt and energetic measures which have, in almost every outbreak, been applied for its eradication. But reference to previous reports of this board shows that a very large number of the inhabitants of the State are without the protection afforded by vaccination, and, when we consider the increasing number of new centers of infection, which is shown by the table of reported cases of communicable diseases, there is little room for expectation that we are longer to go free from numerous widespread outbreaks of this disease, and preparations should everywhere be made by the local sanitary authorities for the prompt isolation of the first case and the immediate vaccination of suspects. Domestic quarantine is uncertain and unreliable in all infectious diseases, and, in dealing with small-pox, all accumulated experience shows that outbreaks can only be restricted with certainty when the patients are removed to a hospital which is controlled by persons who have been trained in the measures which should be taken to prevent communication between infected and non-infected persons. Economy and efficiency are both promoted by the removal of small-pox patients to a hospital, and the public interests cannot be well served in any community where the persons affected with this disease are of necessity kept in their own homes. Co-operation between sanitary districts in the removal and isolation of cases of small-pox, and the erection of one hospital for the reception and care of patients from several neighboring townships and municipalities has important advantages, and such an institution, conducted under the supervision and control of the health board of one of the interested communities, would render far better service in protecting the entire district from infection than could be secured by the maintenance of one hospital in each of the municipalities and townships.

Vaccination.—The appearance of small-pox in numerous localities in New Jersey during the past year has led to the vaccination of a large number of persons, and discussions among medical men as to the most reliable sources of vaccine and the best modes of vaccination have been renewed. Reports received in the office of the State Board of Health show that in some instances no subsequent examination has been made by the physician to learn if the resulting pustule is protective, and in too many cases there has been accidental infection and consequent annoyance to the patient, which is altogether needless. There is no excuse for careless vaccination, and local boards of health are morally bound, and should be legally held, to guard this operation when it is conducted under their supervision or by their direction, against failure by reason of inert virus or because of uncleanly or unskillful manipulation. The examination of the arm on the eighth day, and re-vaccination in cases where failure has occurred, is as much a part of the duty of the vaccinator as it is to perform the primary operation. The fancied security now enjoyed by many recently-vaccinated persons is liable to a rude awakening in the course of some future outbreak of small-pox, because of the negligent manner pursued by some practitioners in conducting the operation. Carelessness of this character should be condemned by every true friend of vaccination, and all should insist upon aseptic precautions and the use of fresh, glycerinated lymph. The following standard rules for vaccination are recommended:

Site.—The insertion of the deltoid in the left arm is to be preferred in children who are old enough to walk, and in adults. The outer side of the thigh, below the junction of the lower and middle thirds, is a site frequently chosen in women and infants; sometimes, also, the junction of the middle and upper third of the leg on the outer side.

Asepsis.—The hands of the operator should be thoroughly scrubbed with soap and water before undertaking this operation. Wash the part to be vaccinated thoroughly with a brush and soap and water, then with plain water. Dry with sterile cotton.

Scarification.—Scrape a surface not over three-eighths of an inch in diameter, so as to bring a little blood or serum. An ordinary cambric needle is the best scarifier. It should be passed through a flame or be boiled before using.

Virus.—Use glycerinated virus; rub it thoroughly into the scarified area with a small piece of wood which has been previously boiled.

The hand of the operator should not touch that portion of the instrument which is to come in contact with the wound. Allow the part to dry in the air; no dressing is necessary.

Cancer.—This disease caused 1,001 deaths in New Jersey during the past year. The number of deaths recorded as being due to cancer for the previous year was 921, and the average number for twenty-three years has been 652. The excess of deaths from this cause for the year ending June 30th, 1901, above the average, was 349.

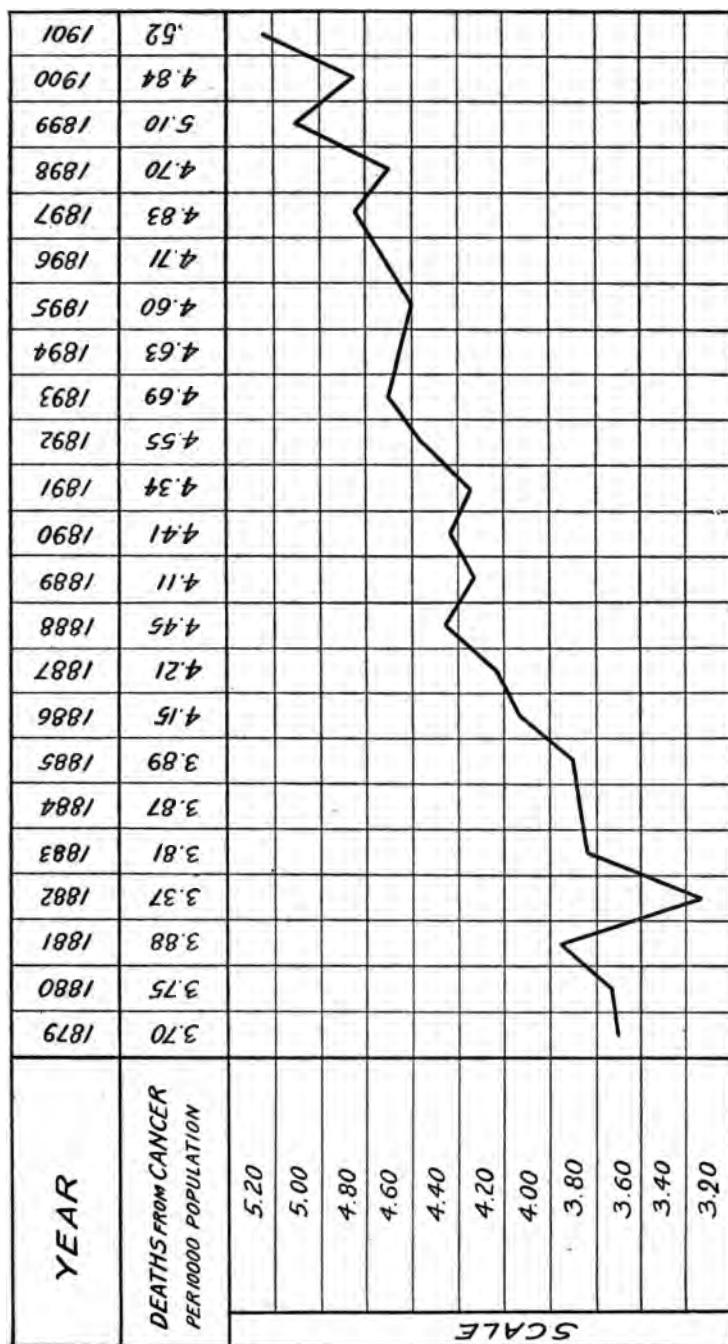
TABLE 21.—SHOWING DEATHS FROM CANCER, PER 100,000 POPULATION, FOR THE TWENTY-THREE YEARS ENDING JUNE 30TH, 1901.

Years.....	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.
Deaths per 100,000 population }	37.0	37.5	38.5	38.7	38.1	38.7	38.9	41.5	42.1	44.5	41.1	44.1
Years.....	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
Deaths per 100,000 population }	48.4	45.5	46.9	46.3	46.0	47.1	48.3	47.0	51.0	48.4	52.0	

TABLE 22.—DEATHS FROM CANCER IN NEW JERSEY FOR THE YEAR ENDING JUNE 30TH, 1901, PER 10,000 POPULATION, BY COUNTIES AND BY CITIES OF OVER 5,000 INHABITANTS.

NAME OF PLACE.	Deaths from cancer.	Deaths per 10,000 population.
Atlantic County.....	21	4.31
Atlantic City.....	16	5.38
Bergen County.....	39	4.81
Englewood.....	3	4.67
Hackensack.....	7	7.09
Burlington County.....	27	4.64
Burlington City.....	2	2.71
Camden County.....	56	5.14
Camden City.....	42	5.36
Gloucester City.....	5	7.18
Cape May County ..	5	3.77
Cumberland County ..	28	5.44
Bridgeton.....	8	5.63
Millville.....	5	4.71
Essex County	202	5.48
East Orange.....	6	2.70
Montclair.....	9	6.25
Newark.....	145	5.75
Orange.....	12	4.92
Hudson County.....	203	5.11
Bayonne.....	18	5.10
Harrison.....	7	6.49
Hoboken.....	31	5.13
Jersey City.....	111	5.26
Town of Union.....	8	5.71
Hunterdon County ..	20	5.80
Mercer County	44	4.52
Trenton.....	34	4.51
Middlesex County.....	31	3.79
New Brunswick.....	8	4.00
Perth Amboy.....	6	3.22
South Amboy.....	4	6.15
Monmouth County.....	53	6.36
Long Branch.....	9	9.80
Morris County.....	40	6.04
Dover.....	3	4.90
Morristown.....	7	6.11
Ocean County.....	11	5.51
Passaic County.....	95	5.95
Passaic City.....	13	4.37
Paterson.....	72	6.75
Salem County.....	14	5.51
Salem City.....	3	5.16
Somerset County ..	13	3.89
Sussex County.....	10	4.09
Union County.....	59	5.77
Elizabeth.....	26	4.83
Plainfield.....	16	10.16
Rahway.....	5	6.30
Warren County.....	19	5.02
Phillipsburg.....	8	7.81
Total in cities of over 5,000 inhabitants..	.....	649
Total for State.....	.....	1,001
Rate per 10,000 population.....	.....	52.0

CHART SHOWING DEATHS IN NEW JERSEY FROM CANCER, PER 10,000 INHABITANTS, FOR TWENTY-THREE YEARS, 1879-1901.



Notification of Communicable Diseases.—The act establishing a uniform requirement for the entire State relative to reporting the more dangerous communicable diseases (chapter 260 of the laws of 1895) has been very generally complied with in the larger towns, but in some of the smaller communities the law has been disregarded. Doubtless the indifference of local boards of health in some localities concerning these reports has led the physicians practicing in those districts to neglect to send notifications, and the spread of scarlet fever and diphtheria has consequently been without official control in these places. The source of this official negligence is found in the unfitness of the persons entrusted with the local administration of the health laws in some sanitary districts, and the only effectual remedy for this official shortcoming is to be found in the enactment of more stringent provisions governing the appointment of the paid employes of local health boards. A bill designed to secure such a reform was introduced in the House of Assembly in 1901, and, notwithstanding the fact that it was then defeated, new advocates of such a measure are appearing, and there is reason to hope that the time is not distant when none but men who have been instructed in the duties and responsibilities of the office will be permitted to serve as sanitary officials. Following is the usual annual table showing the number of cases of communicable diseases reported during the last statistical year.

TABLE 23.—COMMUNICABLE DISEASES REPORTED FOR EACH QUARTER DURING THE YEAR ENDING JUNE 30TH, 1901.

NAME OF SANITARY DISTRICT.	DIPHTHERIA.				SCARLET FEVER.				TYPHOID FEVER.				SMALL-POX.			
	1.	2.	3.	4.	1.	2.	3.	4.	1.	2.	3.	4.	1.	2.	3.	4.
Alloway township.....			1	1		1				1						
Asbury Park city.....							4	19			1				1	
Basking Ridge borough.....	2		3			1	5				2					
Bay Head borough.....									1							
Bayonne city.....	11	39	16	10	3	4	53	26		15	1	5				1
Belmar borough.....			1				2	1		7	4					
Bernards township.....			3				1	3								
Bethlehem township.....				1												
Boonton town.....					1											
Bradley Beach borough.....								6								
Bridgewater township.....	6		2	1					1							
Baena Vista township.....			7				3	27	3							
Burlington city.....								11								
Caldwell borough.....			2													
Camden city.....	86	229	91	19	13	43	82	38	9	10	9	11				2
Carlstadt borough.....	3	3	5				2	5								2
Centre township.....	3		3	1					1							

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TABLE 23.—COMMUNICABLE DISEASES REPORTED FOR EACH QUARTER DURING THE YEAR ENDING JUNE 30TH, 1901—Continued.

NAME OF SANITARY DISTRICT.	DIPHTHERIA.				SCARLET FEVER.				TYPHOID FEVER.				SMALL-POX.			
	1.	2.	3.	4.	1.	2.	3.	4.	1.	2.	3.	4.	1.	2.	3.	4.
Chatham borough.....							1									
Chesterfield borough.....			1													
Collingswood borough.....		2	1	1			1	3				1				
Deerfield township.....	2	13			3	1			1							
Delaware township (C).....							1									
Delran township.....	2				4	14	3	1								
Deptford township.....	1		1				1									
Dover city.....		4					3									
Dunellen borough.....		1		4		1				1						4
East Greenwich township.....	4	10	17	4	3	6	15	4	4	14	5					
East Orange city.....	3	1	1													
East Rutherford borough.....		1														
Eatontown township.....	1															
Egg Harbor City.....	23	17	8	3												
Egg Harbor township.....		1							1	1	2					
Fairview borough.....															1	
Fanwood borough.....				6				1		1						
Florence township.....									4	1						
Franklin township (B).....								8	1	3	1					
Freehold town.....		3	1	1			2									
Garfield borough.....	2	3	2					5		1						4
Glassboro township.....	1		1	2	2		4	3		2						1
Glen Ridge borough.....		4								1						
Gloucester township.....				5												
Greenwich township (G).....	4					5					7					2
Hackensack city.....	4	5	6	7	1	2	6	2		5						
Haddon township.....	1	3	4	6		2		1								
Haddonfield borough.....			4	7				1		2		1				
Hamilton township (A).....								2								
Hanover township.....	1	3														
Harrington township.....		1				7										
Hillsborough township.....				1												
Howell township.....						3										
Jersey City.....	77	180	123	123	36	93	105	219	14	24	5	23		8	5	59
Kearny town.....		3				1										
Keyport town.....		1					2	10								1
Lakewood township.....		1	4	1		5	1	2								
Lambertville city.....	1	2		2	1					1						
Lawrence township (M).....		1														
Linden township.....								4								
Little Ferry borough.....	2															1
Logan township.....							3	9								
Long Branch commission.....				11				4				8				1
Manasquan borough.....																1
Mansfield township (B).....							1	2		2						
Mantua township.....									1	2	1	2				
Metuchen borough.....																
Middle township.....							4	2								
Midland township.....			1	5				1			1					
Millville city.....		3	1	1			2		6	1	1	1				
Montclair city.....		9	29	9	1	3	4	9	12	15	4	1			1	1
Moorestown borough.....		23	7	1		2	4	4	2			1				
Morristown city.....			9	1			8	15			1					2
Mt. Arlington borough.....							3									
Mt. Laurel township.....		1														4
Mt. Holly borough.....				2	3		4	2	5	1						
Neptune City borough.....								3								
Newark city.....	233	532	419	237	75	121	222	223	137	101	58	47			4	59
North Brunswick township.....						2	3									
North Plainfield borough.....		3	1	4	2	12	7	5	2	1						
Ocean Grove Association.....	1						1	5			1					
Oldmans township.....						1	6			2						
Orange city.....	8	23	9	11	3	4	5	6	10	5	2	2			3	
Palmyra township.....			3					1	2							
Park Ridge borough.....							5	2	9							1
Passaic city.....	12	18	16	14	13	11	85	12	14	10	1	3				
Paterson city.....	36	62	66	39	23	76	167	137	35	42	19	20		4	11	25
Pennsgrove borough.....			1	1		3	3				1	1				
Pequanock township.....	2		2	2												
Plainfield city.....	4	4	4	11	5	12	10	2	6	12	3	6				
Pleasantville borough.....		2							2	2						
Princeton borough.....				4				1								

TABLE 23.—COMMUNICABLE DISEASES REPORTED FOR EACH QUARTER DURING THE YEAR ENDING JUNE 30TH, 1901—Continued.

NAME OF SANITARY DISTRICT.	DIPHTHERIA.				SCARLET FEVER.				TYPHOID FEVER.				SMALL-POX.			
	1.	2.	3.	4.	1.	2.	3.	4.	1.	2.	3.	4.	1.	2.	3.	4.
Rahway city.....						3				4						
Red Bank town.....	1		1			1			15							
Riverside borough (Bergen).....						3										
Riverside borough (Burlington).....						1										
Riverton borough.....		1		1		1		11	1							
Rockaway borough.....			4													
Rockaway townsh p.....		2					4	4	1							
Roselle Park borough.....			1													
Salem city.....																
Somerville town.....	1	3		4		2	3		10	11		1				
South Amboy city.....								1								1
South Orange township.....	1	1	1				2			1						
South Orange village.....			3	3			1	3		3						
South River borough.....					1	2	3	4	1	1			1			
Sparta township.....																2
Stafford township.....							3									
Stow Creek township.....																1
Summit city.....	10	9	4	3	3	1	3	5	2		1					
Trenton city.....	9	44	28	14	9	8	6	11	15	13	10	13				
Union township (B).....								3								5
Union township (U).....		1	2	4												
Vailsburg borough.....			2	2			3	3		1						
Vineland borough.....						3	14	2	1	1						
Warren township.....								2				1				
Washington borough.....	1		1			2	1									
Washington township (Bergen).....					2											
Washington township (Burlington).....										1						
Washington township (Gloucester).....	1	1					4		1							
Wenonah borough.....							1									
West Hartford township.....		1	2	4												
West Hoboken township.....		8	21	15	9	7	15	11	17		5	1				4
West Orange township.....		3	6	5	4				4		2	2	1	1		
Winslow township.....										4						
Woodbury city.....	3	12	5		2					1					6	
Woolwich township.....				3				2								
Total cases reported by quarters.....	573	1313	951	607	224	487	891	894	312	353	127	152	2	13	36	174
Total cases reported for year.....				3444				2496				944				225
Total deaths for year.....				426				78				119				5

Bacteriological Laboratory.—The work of the bacteriological laboratory has been extended during the year, and the number of repositories for mailing cases for sending specimens of diseased tissues for diagnosis is at present 171. Many communications have been received from physicians indicating the value of the service which the laboratory affords, and health officers who have come to rely upon its aid in verifying or disproving the existence of diphtheria are defended against the infliction of needless hardships upon individuals suspected to be infected. The report of Mr. H. O. Baldwin, State Bacteriologist, will be found further on in this volume.

Foods and Drugs.—At the last session of the Legislature an act was passed (chapter 85 of the laws of 1901) re-enacting certain provisions of the laws heretofore depended upon to prevent the sale of

adulterated and unwholesome foods and drugs, adding new safeguards and repealing several acts relating to this subject. The new law became operative November 1st, 1901, and its provisions will be enforced by the State Board of Health. The following acts are repealed by the new law: "An act to protect butter and cheese manufacturers," approved March 23d, 1865; "An act relative to the dairy commissioner," approved June 13th, 1895; "An act to prevent the adulteration and to regulate the sale of milk," approved March 14th, 1882, and all acts supplementary thereto and amendatory thereof; "An act to prevent the adulteration of food and drugs," approved March 25th, 1881, and all acts supplementary and amendatory thereof; "An act to prevent the adulteration of candy," approved March 14th, 1895, and "An act to prevent deception in the sale of cake and biscuits and to preserve the public health," approved March 22d, 1895. It will be noted that the act to prevent deception in the sale of oleomargarine, butterine and other dairy products has not been repealed, but remains operative, and that, together with the "Act to prohibit the sale of adulterated and skimmed milk in cities," approved March 23d, 1883, and the "Act to prevent adulteration and deception in the sale of linseed oil," approved May 18th, 1898, it will hereafter be enforced by the State Board of Health. The adulteration of foods, as at present conducted by producers, manufacturers and dealers, consists almost entirely in the substitution of cheaper materials for those nominally or properly composing the article, and poisonous additions are very rarely found. In recent years the methods of falsification have become more numerous, more complex and more difficult of detection outside of the laboratory, and it has been found that in states where food inspection has been actively conducted, and where numerous arrests and convictions have occurred, sophisticated goods have been driven across the borders, into localities where no provision has been made against this evil. It has been estimated that efficient inspection of foods, under laws providing deterrent penalties, saves to the consumer one-fourth of the nutritious elements of his daily supply, and while food adulteration is conducted solely for the purpose of cheating the pocketbook of the buyer, yet it does in fact also diminish the nutrition of the consumer and impair his strength and health. By far the most prevalent food adulteration in New Jersey during the past four or five years has been the addition of preservatives, and all classes of perishable foods have been thus treated at the hands of unscrupulous producers and dealers. After

much agitation relating to the injurious effects of the more common antiseptics, when added to foods, there is now but little disagreement among physiological chemists and hygienists concerning the unhealthy influence which attend the continued ingestion of even small quantities of formaldehyde, boric acid, salicylic acid and certain other chemical substances which are capable of retarding fermentation, and the addition of these articles cannot be justified on any plea. In practice it has been found that fresh meat can be preserved for weeks by low temperatures only, and in the case of milk, if cleanly methods are employed in its collection and storage, it will not undergo decomposition for at least forty-eight hours, which is quite long enough to permit of its being distributed to distant points. It is believed that the new law will afford better protection against the sale of diseased meat than has heretofore been possible, and that by its energetic enforcement the further shipment of tuberculous beef to market will be stopped. Sections 3 (paragraph 5), 7, 8 and 9 of the new law govern the sale of milk, and especial attention will be given to the enforcement of these provisions.

In choosing the inspectors who are to be authorized to represent the State Board of Health in making the inquiries and investigations which are contemplated by the law, the board has proceeded in accordance with rules adopted at a meeting held April 10th, 1896, which read in part as follows: "That a new standing committee shall be appointed, * * * and to this committee shall be assigned the duty of conducting suitable examinations for fitness in the case of all persons who may hereafter apply for appointment to any position within the control of this board. * * * All examinations shall be written as far as possible, and all examination papers and ratings shall be preserved for reference. Appointments will be made from an eligible list of applicants, certified by the said committee to have passed a satisfactory examination in the line of service required."

Acting under the rules above quoted, the standing committee made inquiry concerning the qualifications of the ten applicants for the four appointments as sanitary inspectors under the act referred to. The following questions were presented at the first examination: (1) What protection is afforded by law against the sale of impure milk? (2) Does the law permit the addition of preservatives to food? (3) What duties does the law impose upon State inspectors of foods? (4) What precautions should be taken by inspectors in the collection of samples

of food and drugs? (5) Name ten foods which are frequently adulterated? (6) Name ten drugs which are frequently adulterated? (7) How is the presence of trichinæ detected in meat? (8) What are ptomaines? (9) What effect has temperature upon the working of the lactometer? (10) What are the legal requirements for selling oleomargarine? An oral examination was also conducted by the committee, and stenographic notes were taken of the questions and replies, all of which are on record.

The sole purpose in view in this sifting of the applicants is to bring to the service of the board the most intelligent and capable men whom the salary will attract, and as the act wisely provides for the prompt removal of inefficient appointees, opportunity is afforded to replace those who are found after trial to be incompetent, and the group of men who are finally retained will doubtless rapidly acquire acquaintance with the duties imposed by the laws.

Transportation of the Dead.—To obtain expressions from undertakers throughout the State concerning the advisability of making changes in the regulations which have been on trial during the past year, the following circular letter was sent to seventy-five persons who are engaged in the undertaking business in New Jersey :

“BOARD OF HEALTH OF THE STATE OF NEW JERSEY, }
“TRENTON, April, 1901. }

“DEAR SIR—Alterations in the rules relating to the transportation of the dead are now under consideration, and you are requested to suggest any changes which in your judgment will improve the methods prescribed in the recently amended rules, a copy of which is enclosed. These rules are designed to prevent the causation of a nuisance by the escape of offensive gases and fluids from burial cases containing dead human bodies, during transportation in public conveyances.

“Very respectfully,

“HENRY MITCHELL,
“Secretary.”

Only twelve replies were received to the foregoing communication, but the views of those who expressed their opinions seemed to warrant certain changes in the regulations, and at a meeting of the State Board of Health, held April 9th, 1901, the alterations referred to were adopted. Following is a copy of the revised regulations :

Rules regulating the transportation of dead human bodies by common carriers, issued by the Board of Health of the State of New Jersey under authority contained in chapter 156 of the Laws of 1900.

1. The transportation of bodies dead of small-pox, Asiatic cholera, yellow fever, typhus fever and bubonic plague is forbidden except a license therefor is first obtained from the State Board of Health, or from an inspector or officer of said board, and no license for the transportation of bodies dead of said diseases will be issued until it is shown that said bodies have been prepared in accordance with the written requirements which shall in each case be specified and made a part of said license.

When the dead body is not to remain unburied longer than seventy-two hours.

2. The bodies of human beings dead of diseases not named in rule number one shall not be transported by any common carrier unless said bodies shall first have been treated as follows: (a) Remove all garments from the dead body and apply to the surface a solution of bichloride of mercury prepared as follows: one part each of bichloride of mercury and muriate of ammonia to 1,000 parts of water. (b) Fill all openings with cotton wool which has first been saturated with the mercurial solution and allowed to dry. The cotton should be used dry and be firmly packed. (c) The body should be placed in a coffin or casket, and should rest upon a layer of sawdust or other absorbent material not less than two inches in thickness. After the body has been placed in the coffin the coffin should be securely closed. (d) The coffin or casket containing the dead body should be placed in an outer box, strongly made of seven-eighths boards.

When the dead body is to remain unburied longer than seventy-two hours, and in all cases of diphtheria, membranous croup, scarlet fever, chicken-pox, measles and erysipelas.

3. After being prepared as required by rule two, the dead body, contained in the coffin or casket, should be placed in a substantial metal-lined box, and said metal lining should be made air-tight by soldering all of the joints and seams.*

*The preparation of dead human bodies for transportation by public carriers, as provided for in these rules, does not preclude the employment of additional precautions against the decomposition of the remains.

6. No disinterred body shall be offered for transportation to any common carrier unless the disinterment has been authorized in writing by the local board of health, nor unless written consent for such transportation shall have been obtained from the health authorities of the locality to which the said disinterred body is to be consigned. All disinterred bodies shall be enclosed in an air-tight, metal-lined box, and all joints and seams in said metal lining shall be soldered. Bodies placed in receiving vaults shall be treated in the same manner as bodies buried.

C. F. BRACKETT,
President.

June 28th, 1901.

An application from John H. Francisco and others for reversal of the action of the local governing board and the board of health of the town of Bloomfield, dated April 5th, 1901, was granted by the State Board of Health at a meeting held June 28th, 1901. A writ of *certiorari* was issued by Justice Franklin Fort, directing that the proceedings of the State Board of Health in this case be reviewed, and return was made as follows:

Figure 1. The effect of the number of trials on the number of correct responses. The number of correct responses was significantly higher than the number of incorrect responses in all conditions.

part is within the present limits of the borough of Glen Ridge, and about one-third of whose area is in the present limits of the town of Bloomfield. The other is a Roman Catholic cemetery.

5. Your petitioners further show that no objections were made to the granting of their said application before the town council of said town of Bloomfield, and that the only objections stated to the board of health in opposition to the granting of said application was that certain persons, residents of said town, did not desire an additional cemetery in said town; that it was freely conceded at the meeting of said local board of health that the proposed location of such new cemetery was wholly free from objection from any sanitary consideration, or on any grounds relating to the healthfulness of the inhabitants of the town of Bloomfield.

6. That by reason of the refusal of the local board of health of the town of Bloomfield to grant your petitioners' application for the location of a new cemetery as prayed for in said petition, and shown on said map, your petitioners hereby apply to the State Board of Health to reverse the decision of the local authorities so far as relates to the refusal of the local board of health to grant said application, and hereby apply to your Honorable Body, the State Board of Health, to grant the said application for the location of a new cemetery in said town of Bloomfield, in the county of Essex, upon the premises containing about thirty-six acres, shown on the map heretofore filed with your Honorable Body.

John H. Francisco, Charles H. Barkhorn, Theodore F. Lemassena, Rev. Maasheim S. Waters, Otto E. Schaeffer, Rev. Eugene E. Neudewitz, Rev. Elmer W. Fulper. By Halsey M. Barrett, attorney for the above-named applicants.

Dated April 5th, 1901.

2. COPY OF A PORTION OF THE MINUTES OF A REGULAR STATED MEETING OF THE BOARD OF HEALTH OF THE STATE OF NEW JERSEY, HELD IN THE STATE HOUSE, TRENTON, APRIL 9TH, 1901.

"The application of John H. Francisco and others for the reversal of the decision of the board of health of the town of Bloomfield, Essex county, relating to the establishment of a cemetery, was read. On motion of Col. Olcott, the application was referred to the standing committee on cemeteries, burial and transportation of the dead, and the secretary was authorized to call a meeting of the board as soon as the report of the committee is ready for presentation."

3. COPY OF A PORTION OF THE MINUTES OF A SPECIAL MEETING OF THE BOARD OF HEALTH OF THE STATE OF NEW JERSEY, HELD IN THE STATE HOUSE, TRENTON, MAY 14TH, 1901.

"The application of the Bloomfield Cemetery Company for reversal of the decision of the local board of health was considered, and Mr. Olcott made a statement as to the need of a cemetery in that locality. The report of the committee on Bloomfield cemetery application was read and placed on file."

4. COPY OF A PORTION OF THE MINUTES OF A MEETING OF THE BOARD OF HEALTH OF THE STATE OF NEW JERSEY, HELD IN THE STATE HOUSE, TRENTON, JUNE 28TH, 1901.

"On motion it was ordered that the action of the local board of health of the town of Bloomfield, in refusing to grant permission for the establishment of a cemetery by John H. Francisco and others, is hereby reversed, and that the application of said John H. Francisco and others for the establishment of said cemetery is granted."

5. COPY OF REPORT OF THE STANDING COMMITTEE OF THE BOARD OF HEALTH OF THE STATE OF NEW JERSEY ON CEMETERIES, BURIAL AND TRANSPORTATION OF THE DEAD, CONCERNING THE APPLICATION OF JOHN H. FRANCISCO AND OTHERS TO LOCATE A CEMETERY IN THE TOWN OF BLOOMFIELD.

To the Board of Health of the State of New Jersey:

GENTLEMEN—Following is a copy of an application received at the office of the Board of Health of the State of New Jersey, dated April 5th, 1901, for the reversal of the decision of the local board of health of the town of Bloomfield and the granting of said application:

To the Honorable the State Board of Health of the State of New Jersey, Trenton, N. J.:

GENTLEMEN—Your petitioners, John H. Francisco, Charles H. Barkhorn, Theodore F. Lemassena, Rev. Masheim S. Waters, all of the city of Newark, in the county of Essex; Otto E. Schaeffer, of the town of Montclair, in the county of Essex, Rev. Eugene E. Neudewitz and Rev. Elmer W. Fulper, of Jersey City, in the county of Hudson, respectfully show:

1. That on December 24th, 1900, they made application in writing to the town council of the town of Bloomfield, and also to the board of health of the town of Bloomfield, in the county of Essex, praying the consent and approval of the municipal authorities and board of health of the said town of Bloomfield to the location of a new cemetery in said town, upon premises shown on a map accompanying said petition and filed therewith with the town clerk, which premises contained about thirty-six acres of land, a copy of which map was filed with your Honorable Body, the State Board of Health, on Tuesday, April 2d, 1901, and they respectfully prayed the consent and approval of the municipal authorities and board of health of the said town of Bloomfield, in which it is proposed to locate said new cemetery.

2. That on December 24th, 1900, their said application was referred to a committee of the town council for its consideration, and that at the next regular meeting of the town council, held on January 7th, 1901, the committee reported to the council that they had examined the locality and also had inquired of persons who might be interested, and that there was no objection from any source to the granting of the application, and recommended that the council give its consent to the location of a cemetery, as prayed in said petition; that action on the committee's report was deferred for two weeks, and on January 21st, the next regular meeting of the council, no objection being made either by citizens or by any members of the council, a consent to the location of such new cemetery was granted by the town council of Bloomfield, a certified copy of which consent is in the possession of your petitioners, and is as follows:

WHEREAS, John H. Francisco and others have petitioned the town council of the town of Bloomfield and the board of health of said town of Bloomfield, praying the consent and approval of the municipal authorities and board of health of said town of Bloomfield to the location of a new cemetery in the town of Bloomfield, upon the premises shown on the map accompanying said petition, and filed therewith on January 7th, 1901, which premises contain about thirty-six acres, and are bounded on the north by Franklin avenue, on the east by the line of the township of Belleville, on the west by a right of way known as Davy's lane, and extending back on the south to Third river and the raceway thereof, and other lines as shown on said map; now, therefore, be it

Resolved, That the town council of the town of Bloomfield, in the county of Essex, being the municipal authority of said town, do hereby consent to and approve of the location of a new cemetery in the town of Bloomfield, upon the premises shown on the map accompanying said petition of John H. Francisco and others, and this consent shall take effect when the board of health of said town of Bloomfield shall have given a like consent to and approval of the location of said new cemetery, as prayed in said petition.

A true copy of a resolution passed by the town council of the town of Bloomfield, February 4th, 1901.

[L. S.]

WM. L. JOHNSON,
Town Clerk.

3. That the application of your petitioners was then presented to the local board of health of the town of Bloomfield at its regular monthly meeting, held on February 21st, and on motion was laid over to be considered at an adjourned meeting of the board of health, to be held on Tuesday, March 5th, at which time said local board of health passed a resolution refusing said application.

4. That there are but two incorporated cemeteries in the town of Bloomfield; one is the old cemetery known as the Bloomfield Cemetery Company, of which the larger part is within the present limits of the borough of Glen Ridge, and about one-third of whose area is in the present limits of the town of Bloomfield. The other is a Roman Catholic cemetery.

5. Your petitioners further show that no objections were made to the granting of their said application before the town council of said town of Bloomfield, and that the only objections stated to the board of health in opposition to the granting of said application was that certain persons, residents of said town, did not desire an additional cemetery in said town; that it was freely conceded at the meeting of said local board of health that the proposed location of such new cemetery was wholly free from objection from any sanitary consideration, or on any grounds relating to the healthfulness of the inhabitants of the town of Bloomfield.

6. That by reason of the refusal of the local board of health of the town of Bloomfield to grant your petitioner's application for the location of a new cemetery as prayed for in said petition, and shown on said map, your petitioners hereby apply to the State Board of Health to reverse the decision of the local authorities so far as relates to the refusal of the local board of health to grant said application, and hereby apply to your Honorable Body, the State Board of Health, to grant the said application for the location of a new cemetery in said town of Bloomfield, in the county of Essex, upon the premises containing about thirty-six acres, shown on the map heretofore filed with your Honorable Body.

SECRETARY'S REPORT.

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John H. Francisco, Charles H. Barkhorn, Theodore F. Lemassena, Rev. Masheim S. Waters, Otto E. Schaeffer, Rev. Eugene E. Neudewitz, Rev. Elmer W. Fulper. By Halsey M. Barrett, attorney for the above-named applicants.

Dated April 5th, 1901.

A map of the site of the proposed cemetery was received and filed in the office of the board April 1st, 1901. Following is a copy of a letter acknowledging receipt of said map:

"April 1st, 1901.

"*Halsey M. Barrett, Esq., Attorney-at-Law, Prudential Building, Newark, N. J.:*

"DEAR SIR—We have this day received a blue print of a portion of Belleville township. An inscription on said blue print, signed by you, states that it is a copy of a descriptive map showing the location in which it is proposed to establish a new cemetery, but nothing on said blue print indicates where said cemetery is to be located, nor does anything on said blue print indicate that any cemetery exists in the territory mapped.

"Very respectfully,

"HENRY MITCHELL,

"*Secretary.*"

At the stated meeting of the Board of Health of the State of New Jersey, held April 9th, 1901, the foregoing application was referred to the standing committee on cemeteries, burial and transportation of the dead for investigation and report. On April 15th, Col. Olcott, of the committee, accompanied by Dr. A. C. Hunt, visited the site of the proposed cemetery. Following is a copy of a report by Dr. A. C. Hunt of the inspection of the locality:

"*Board of Health, State of New Jersey:*

"GENTLEMEN—In company with Mr. George P. Olcott, a member of the committee on cemeteries, burial and transportation of the dead, of this board, an examination was made, upon April 15th, 1901, of the site which has been chosen for cemetery purposes in the town of Bloomfield, Essex county, and I would report as follows:

"The cemetery company has purchased a farm which is located northeast from Bloomfield Center. The farm is one and a half miles from the center of the town. The proposed site is on the extreme northeasterly border of the town, and a portion of the farm extends into Franklin township, Essex county. The company has made application for the portion of the farm lying in Bloomfield.

"*Location.*—The site chosen consists of rolling hills, partly wooded. There are one or two places on the farm which have no outlet for storm water. These low, cup-shaped spots can be drained to the level along the Third river

"*Soil.*—The soil in this section consists of sand, gravel and red shale, and is porous in character.

"*Relation to Water Supplies.*—The drainage from the land finally reaches what is known as Third river, and thence into the Passaic river above Belleville. The waters of the Third river and the Passaic river, below the point where the Third river discharges into it, are not used as a public water-supply by any municipality.

"*Relation of Dwellings to Proposed Site.*—There are but two houses within a quarter of a mile of the site chosen for the cemetery, and the immediate surrounding country is sparsely settled.

"Cemeteries in Bloomfield.—There are three other cemeteries in Bloomfield. One is owned and operated by the Bloomfield Cemetery Company. This was examined, and from statements made by Mr. Olcott, who is acquainted with the lands owned by the company, and also from observation of the ground, it would appear that the cemetery is nearly filled with bodies, and that the unoccupied portions are controlled by private owners. The Catholic cemetery, located within the corporate limits of Bloomfield, is not available for the burial of persons outside of the church membership. There is one other cemetery in Bloomfield, but I was informed that it is little used for burial purposes. Montclair is located within two miles of Bloomfield, and the burial of the inhabitants of Montclair is made for the most part in Rosedale Cemetery. This cemetery is not available for the burial of persons dying in Bloomfield, except in a few instances where lots have been purchased by residents of Bloomfield.

"Respectfully submitted,

"A. CLARK HUNT,

"Medical Inspector."

Following is a copy of the record of a hearing given before the standing committee of the State Board of Health on cemeteries, burial and transportation of the dead, in the State House, Trenton, New Jersey, Friday, April 19th, 1901:

At a hearing concerning an application for the establishment of a cemetery within the limits of the town of Bloomfield, Essex county, New Jersey, given by the standing committee of the State Board of Health on cemeteries, burial and transportation of the dead, in the State House, Trenton, New Jersey, at 2:30 P. M., Friday, April 19th, 1901, Halsey M. Barrettp, Esq., of Newark, represented the parties desiring the establishment of the cemetery in the town of Bloomfield, and Robert H. McCarter, Esq., of Newark, represented those who are opposed to the establishment of the same. About twenty persons interested in the establishment of the cemetery were also present.

Upon invitation from Dr. Murray, chairman of the committee on cemeteries, burial and transportation of the dead, Mr. Barrettp opened the discussion. He stated that he represented persons who desired to establish a cemetery in Bloomfield, and that he would briefly recite the steps which had thus far been taken in the matter. At this time Mr. McCarter asked if he might interrupt, as he wished to make a statement. In the course of his remarks he said that he appeared on behalf of certain citizens of Bloomfield, some 300 in number, who signed an objection which was presented to the local board of health of Bloomfield. He stated that he did not think conditions existed at this time which gave the State Board of Health the right to consider an appeal in regard to the establishment of the cemetery, but that the application for the establishment of the cemetery must be refused by both the town council and board of health of Bloomfield before action is taken by the State board while in this case it had been granted by the town council and refused by the local board of health. He said he did not wish to stand on technicalities, but wished to have the matter right, and that the people of Bloomfield were prepared to meet the question on its merits at the proper time. He said, if necessary, the question could be presented to the courts, but that he did not want to take this course. Mr. McCarter read from the law in regard to obtaining consent of municipal authorities, and contended that the proceedings should be referred back to the local authorities, in order that they might all concur or object to the matter.

Mr. Barrett said if there was a legal question relating to this matter it was then a question for the courts to decide, and that the suggestion that it be referred back to the local board of health seemed to have no practical merits. He said neither the State Board of Health nor any other tribunal had the right to make either of the municipal corporations reconsider their action. He stated that the town council had been asked to reconsider their consent and they had refused to do so, and that the local board of health had also been asked to reconsider their refusal and they had refused to do so. Mr. Barrett said that the spirit of the statute requires an appeal to the State Board of Health upon failure to get the required consent from the local board of health and council. The committee decided that the precedent had been firmly established that such appeals as the one in question could be heard by the board.

Mr. McCarter then said he wished to make the following statement: "On behalf of the parties whom I represent, I object to this scheme, and notice is given that application will be made to the Supreme Court to go over the whole matter. The mere fact, with great respect to the committee, that they have acted does not make it right, and I give warning that we will ask the court to reconsider this matter."

Mr. Barrett then took up the discussion of the case, and in the course of his remarks made the following statements: "On December 24th, 1900, John H. Francisco and others presented an application to the local authorities of the town of Bloomfield for the location of a cemetery within the limits of said town. The premises desired for the cemetery are a part of the Gillespie estate, located in the northeasterly corner of the town, adjoining the township of Belleville, and contain about thirty-six acres. This section is sparsely settled, there being not more than half a dozen houses located within one-half mile of the premises. On December 24th the application was referred to a committee of the town council, and action was deferred until January 21st, 1901, when, there being no objection, it was granted. The petition was presented to the board of health on February 21st, 1901, and was laid over until March 5th. At this meeting a remonstrance against the location of the cemetery, signed by about two hundred citizens of the town, was presented, and only three or four persons who had signed such remonstrance were present. It was admitted by H. E. Richards, Esq., counsel for the persons who signed the protest, that there was no objection to the cemetery from any sanitary consideration. The objections were purely sentimental. The board of health, without any discussion or argument and without stating individual views, passed a resolution that the application be denied. Subsequently, I got an opinion from Attorney-General Grey as to the jurisdiction of the local board of health in this matter, and I asked the local board to reconsider, in order that they might correct their unjust action. At the next meeting Mr. Richards presented an opinion by Mr. Robert H. McCarter, opposing that by Attorney-General Grey. No reason for objecting to the cemetery was given at any time except that they did not want another cemetery in Bloomfield. I have lived in Bloomfield for thirty-five years, and venture the assertion that there are only seven or eight persons in Bloomfield who object to the establishment of this cemetery. Only two have come to me with objections and they are not here to-day. At the present time Bloomfield is very much restricted in its cemeteries. There are only two incorporated cemeteries in the town, and one of these is a Catholic cemetery. The old Bloomfield cemetery contains a tract of about twelve acres, but only four acres of this cemetery are located within the limits of the town of Bloomfield. This cemetery is full and it is almost impossible

to obtain a good plot for family use, unless you can persuade some family to sell part of a plot that they obtained some years ago."

In reply to a question from Mr. McCarter as to whether any of the applicants lived in Bloomfield, Mr. Barrett stated that they did not and that the law did not require that they should.

Mr. Barrett further said: "I have here a consent signed by property-owners living in the immediate vicinity of the proposed cemetery, some in Franklin and some in Belleville township, which shows that there is no local objection to the matter. The land desired for the cemetery is drained by Third river. Mr. Francisco's wife is the owner of the land, and it is a matter of great importance to her whether this application is refused or granted. Mr. Barkhorn and other gentlemen connected with the Lutheran denomination are also petitioners in this case."

In response to a question from Col. Olcott, member of the committee on cemeteries, burial and transportation of the dead, as to whether the application was made to the local board of health with the understanding that they were to consider the case only from a sanitary point of view, Mr. Barrett stated that there was no distinct understanding, but that it was his view of the case that it should be considered from a sanitary standpoint, and that the local board of health also took this view until after they held a meeting at which Mr. Richards, counsel for the board, advised them that they were not obliged to give a reason for their action.

Col. Olcott also asked if the local board of health was given plenty of time to investigate before a report was demanded from them, and Mr. Barrett stated that they were given ample time to investigate.

Dr. Murray asked if the cemetery was intended solely for the use of the Lutheran Church, and also how many cemeteries were located within five miles of Bloomfield. Mr. Barrett replied that it was not for the use of the Lutheran Church alone, and he mentioned six cemeteries located within five miles of Bloomfield. In reply to questions from Dr. Murray as to whether Mount Hebron and Rosedale cemeteries, which are located near Bloomfield, are full, Mr. Barrett said that they were not quite filled up, but that both were old cemeteries.

Mr. McCarter, in his argument against the establishment of the cemetery, stated that the people whom he represented supposed that the hearing would be given before the State Board of Health, and that this hearing before the committee on cemeteries would only be a preliminary skirmish, and, therefore, those who objected to the establishment of the cemetery were not present at this time. He said the enterprise projected here is a stock-jobbing enterprise; it has already sought a location in Westchester county, New York, and in Belleville township, New Jersey, but has failed to obtain consent in those places; it claims to have a capitalization of \$50,000 preferred stock and \$200,000 common stock; it calls itself the Teutonia Lutheran Realty Company, and offers tempting bribes to those who will go into the enterprise. Mr. McCarter said that he was told by Mr. Waters, pastor of one of the Lutheran churches in Newark, that the Lutheran body had no authorized connection with the cemetery, and that the enterprise has an advisory committee consisting of five clergymen, none of whom are located nearer than Jersey City, and some live in New York and, therefore, the enterprise is not to get a cemetery to meet the local needs of Bloomfield. Mr. McCarter stated that he had no interest in the matter except in a professional relation, and that he had no connection with the application when it was before the local council in Bloomfield, but was told that the reason why there was no objection was because nobody knew anything about it. He said the

people of Bloomfield did not want the cemetery, as it would not be a benefit to them, but to New Yorkers and others.

Rev. M. S. Waters, pastor of the Grace English Lutheran Church of Newark, said that he had filed a paper with the State Board of Health, giving his reasons why he had withdrawn from the enterprise, and he further stated that he objected to the project because he thought it was a wrong to the Lutheran Church.

Rev. J. Fred. W. Kitzmeyr, a Lutheran clergyman, stated that he wished to say that all of the Lutheran clergymen had not withdrawn, and that the corporation which wanted to establish a cemetery in Westchester county, New York, was under the control of entirely different men. He said this cemetery has the Lutheran Church behind it to some extent, and Mr. Waters was with us until he consulted an attorney, who made it clear to him that his connection with the cemetery was improper.

Mr. Jacob Post stated that he had lived in Bloomfield forty years, and, although he had no interest in this cemetery, he thought they needed another cemetery in Bloomfield.

Mr. Wood stated that he expected to move to Bloomfield, and was interested in the project.

The hearing was then adjourned.

The following papers have been filed with the committee, and are herewith submitted as a part of our report: 1. Argument of Halsey M. Barrett, attorney for applicants, together with statement of facts. 2. Opinion of Hon. S. H. Grey, Attorney-General. 3. Petition by 32 residents in the locality of the site of the proposed cemetery, with map. 4. Statement by three Lutheran clergymen. 5. Map of Essex county. 6. Opinion of R. H. McCarter. 7. Communication from Rev. M. S. Waters. 8. Notice of application by R. H. McCarter to the Supreme Court for review of proceedings of State Board of Health in the matter relating to the application for reversal of the action of the local board of health of the town of Bloomfield.

We also call attention to the opinion of Hon. J. W. Griggs, which was presented to this board in the case of the appeal of Abraham Vermeulen from the decision of the local board of health of the township of Saddle River. This opinion deals with questions of jurisdiction, which are also raised in the case now under consideration.

The foregoing statement places before the board all facts bearing upon the questions involved in relation to the proposed establishment of a cemetery in Bloomfield, as far as your committee has been able to obtain them.

Respectfully submitted,

WM. H. MURRAY,

GEO. P. OLOOTT,

Committee.

Dated May 14th, 1901.

6. COPY OF OPINION OF HON SAMUEL H. GREY, DATED MARCH 20TH, 1901.

TRENTON, N. J., March 20th, 1901.

Halsey M. Barrett, Esq., Prudential Bldg., Newark, N. J. :

DEAR SIR—You desire my opinion upon the question as to whether the board of health of the town of Bloomfield, in passing upon the question as to whether a new cemetery or burying ground shall be located within the town, can determine that

question upon any other consideration than the effect upon the public health of such location.

I have read the statement of facts furnished by you and herewith returned. It appears from this statement of facts that the provisions of the thirty-third section of the act concerning cemeteries (Gen. Stat., p. 355) were complied with; that the application for the location of the new cemetery had been made in writing to the municipal authorities, had been approved by such authorities and been referred to the board of health for its approval. It further appears from this statement that the giving of the consent by the board of health was opposed by counsel acting for several hundred citizens, who had remonstrated in writing against the granting of the consent of the board to the location of the cemetery. It further appears that counsel for the remonstrants admitted, at the hearing before the board, that there were no objections to the location of the cemetery from any sanitary consideration; that if a new cemetery was to be located in Bloomfield, no better location could be selected; that if it was proposed to locate the cemetery on the adjoining tract of land, owned by the Gillespie estate, situate in the township of Belleville, the people of Bloomfield would not have any objections; that no question of health was involved in the matter; that the objection was purely sentimental, and arose from the fact that the people of Bloomfield did not want an additional cemetery within the area of the town.

The powers of the board of health of the town of Bloomfield are defined by law; they are the same as those conferred upon the State Board of Health, which, in section 2 of the statute, are thus described (Gen. Stat., p. 1634, § 2): "The State board shall take cognizance of all matters affecting health and life among the citizens of this State, shall make sanitary investigations and inquiries in respect to the people, the causes of diseases, and especially of epidemics and the sources of mortality, and the effects of localities, employments, conditions and circumstances on the public health; they shall also make investigations and inquiries into the sanitary condition of any State, county, city or township almshouse, asylum, prison, penitentiary, jail, reform school, school-house or other public building, and of tenements, manufactories and workshops." This is a legislative definition and description of the character of the powers possessed by the State board. The Cemetery act (Gen. Stat., pp. 354, 355) is purely sanitary in its objects. The first section prescribes the manner of burying dead bodies. A subsequent section prohibits the deposit of dead bodies in receiving vaults of a certain character for more than forty-eight hours, within certain periods of the year. Another section authorizes the municipal authorities, or any local board of health, by its officers or agents, to enter into any cemetery or burying-ground within its limits, to examine into the condition and ascertain whether the laws regulating it are duly observed. The next section is the only one under which power is given to the local board of health to approve or disapprove of the location of a new cemetery, and the question presented for consideration arises under that section. In my opinion, the object for the organization of the State Board of Health, as well as of all the local boards, is to preserve and protect the public health. Their function is purely and exclusively a sanitary one. Their action cannot, with propriety, be influenced by any other than sanitary considerations. It seems to me quite obvious that the legislation referred to, under which their approval is required to the location of a new cemetery, is utterly destitute of any provision which confers upon the local board of health the power to grant or refuse permission for the loca-

tion of a new cemetery upon sentimental or commercial considerations. The board must be influenced wholly by the single question as to whether or not the public health will be, in its opinion, injuriously affected by the location of the cemetery. It is manifest from the concessions of counsel above cited that the objection to the location of the new cemetery was absolutely and entirely sentimental. It did not, in any degree, involve any question of sanitation. It was not claimed that the public was, or could, under any circumstances, be injuriously affected by the location of the new burying-ground, and in my judgment the board of health erred in permitting itself to be influenced by any other consideration than the single one of the benefit or disadvantage to the public health which the location of the new cemetery would involve. I have read your argument, a typewritten copy of which I herewith return, and I entirely concur in the views which you expressed and the conclusions which you reached.

Very truly yours,

S. H. GREY.

7. COPY OF PETITION OF JOHN H. FRANCISCO AND OTHERS TO THE TOWN COUNCIL OF THE TOWN OF BLOOMFIELD, TO LOCATE A NEW CEMETERY IN SAID TOWN.

To the Honorable the Town Council of the Town of Bloomfield, in the County of Essex, and also to the Honorable the Board of Health of the Town of Bloomfield, in the County of Essex:

Your petitioners, John H. Francisco, Charles H. Barkhorn, Theodore F. Lemassena, Rev. Masheim S. Waters, all of the city of Newark, in the county of Essex; Otto E. Schaeffer, of the town of Montclair, in the county of Essex; Rev. Eugene E. Neudewitz and Rev. Elmer W. Fulper, of Jersey City, in the county of Hudson, respectfully show that they desire to locate a new cemetery in the town of Bloomfield, upon premises shown on the map accompanying this petition, which premises contain about thirty-six acres. And they respectfully pray the consent and approval of the municipal authorities and board of health of the said town of Bloomfield, in which it is proposed to locate said new cemetery.

And your petitioners, as in duty bound, will ever pray, &c.

John H. Francisco, Chas. H. Barkhorn, Theodore F. Lemassena, Masheim S. Waters (Rev.), Otto E. Schaeffer, Eugene E. Neudewitz, Elmer W. Fulper.

Dated December 24th, 1900.

8. COPY OF RESOLUTION PASSED BY TOWN COUNCIL OF BLOOMFIELD, GRANTING APPLICATION OF JOHN H. FRANCISCO AND OTHERS TO ESTABLISH A NEW CEMETERY IN THE TOWN OF BLOOMFIELD.

WHEREAS, John H. Francisco and others have petitioned the town council of the town of Bloomfield and the board of health of said town of Bloomfield, praying the consent and approval of the municipal authorities and board of health of said town of Bloomfield to the location of a new cemetery in the town of Bloomfield, upon the premises shown on the map accompanying said petition and filed therewith on January 7th, 1901, which premises contain about thirty-six acres, and are bounded on the north by Franklin avenue, on the east by the line of the township of Belleville, on the west by a right of way known as Davey's lane, and extending back on the south to Third river and the raceway thereof, and other lines as shown on said map; now, therefore, be it

Resolved, That the town council of the town of Bloomfield, in the county of Essex, being the municipal authority of said town, do hereby consent to and approve of the location of a new cemetery in the town of Bloomfield, upon the premises shown on the map accompanying said petition of John H. Francisco and others, and this consent shall take effect when the board of health of said town of Bloomfield shall have given a like consent to and approval of the location of said new cemetery, as prayed in said petition.

A true copy of a resolution passed by the town council of the town of Bloomfield, February 4th, 1901.

[L. S.]

WM. L. JOHNSON,
Town Clerk.

9. COPY OF STATEMENT OF FACTS PRESENTED BY HALSEY M. BARRETT, ESQ., AT A HEARING GIVEN BY A COMMITTEE OF THE BOARD OF HEALTH OF THE STATE OF NEW JERSEY IN THE MATTER OF THE APPLICATION OF JOHN H. FRANCISCO AND OTHERS FOR CONSENT TO LOCATE A NEW CEMETERY IN THE TOWN OF BLOOMFIELD.

In the matter of the application of John H. Francisco and others for consent to the location of a cemetery in the town of Bloomfield. Statement of facts by Mr. Barrett.

On December 24th, 1900, John H. Francisco and others, presented to the town council of the town of Bloomfield, in the county of Essex, a petition addressed to the town council of the town of Bloomfield and also to the board of health of the town of Bloomfield, praying the consent and approval of the municipal authorities and board of health of the said town of Bloomfield to the location of a new cemetery in said town, upon premises shown on a map accompanying said petition and filed therewith with the town clerk, which premises contain about thirty-six acres of land. The premises in question are a part of the Gillespie estate, and are located in the north-easterly corner of the town, adjoining the township of Belleville. This section of the town is very sparsely settled, not more than a half dozen houses being located within a half mile of the premises. The Gillespie estate is the owner of the property on three sides of the proposed cemetery, and Franklin avenue, a public highway under the care of the county, is the northerly boundary of the tract.

On December 24th the application was referred to a committee of the town council for its consideration. At the next regular meeting of the town council, held on January 7th, 1901, the committee reported to the council that they had examined the locality and had also inquired of persons who might be interested, and that there was no objection from any source to the granting of the application, and recommended that the council give its consent to the location of a cemetery.

At the request of one of the members of the council, action was deferred for two weeks, and on January 21st, the next regular meeting of the council, no objection was made either by citizens or by any members of the council, and the consent was granted, four of the members of the council voting in favor and two voting against it, and the chairman not voting. As a matter of fact, the chairman declared himself in favor of granting the request.

The resolution adopted by the town council was as follows:

WHEREAS, John H. Francisco and others have petitioned the town council of the town of Bloomfield, and the board of health of said town of Bloomfield, praying the consent and approval of the municipal authorities and of the board of health of said town of Bloomfield to the location of a new cemetery in the town of Bloomfield, upon the premises shown on the map accompanying said petition and filed therewith on January 7th, 1901, which premises contain about thirty-six acres, and are bounded on the north by Franklin avenue, on the east by the line of the township of Belleville, on the west by a right of way known as Davey's lane, and extending back on the south to Third river and the raceway thereof, and other lines as shown on said map; now, therefore, be it

Resolved, That the town council of the town of Bloomfield, in the county of Essex, being the municipal authority of said town, do hereby consent to and approve of the location of a new cemetery in the town of Bloomfield, upon the premises shown on the map accompanying said petition of John H. Francisco and others, and this consent shall take effect when the board of health of said town of Bloomfield shall have given a like consent to and approval of the location of said new cemetery as prayed in said petition.

The petition was then presented to the local board of health of the town of Bloomfield, at its regular monthly meeting held on February 21st, and on motion it was laid over to be considered at an adjourned meeting of the board of health, to be held on Tuesday, March 5th. At this meeting a remonstrance against granting the consent of the board of health to the location of the proposed cemetery was presented, signed by about two hundred citizens of the town; only three or four citizens who had signed such remonstrance were present.

It was admitted at the hearing, by H. E. Richards, Esq., who acted as counsel for the persons signing the protest, that there were no objections to the location of such cemetery from any sanitary consideration; that if a new cemetery was to be located in Bloomfield, no better location could be selected; that if it was proposed to locate said cemetery on the adjoining tract of land owned by the Gillespie estate and situated in the township of Belleville, the people of Bloomfield would not have any objection thereto; that no questions of health were involved in the matter; that the objections were purely sentimental and arose from the fact that the people of Bloomfield did not want an additional cemetery within the area of the town.

It was contended by Halsey M. Barrett, counsel for the petitioners, that the board of health could not consider such objections as these; that the consent of the town council disposed of all such considerations; that the jurisdiction of the board of health was based wholly on the fact that such a cemetery might be either a public or a private nuisance from a sanitary point of view.

The president of the board of health asked the counsel of the town whether the board would be limited in their consideration of this matter to the question whether the proposed cemetery would be a menace to the health of the people of the town, and the town counsel stated his opinion that the board of health were not so limited, but inasmuch as the act relating to cemeteries did not expressly limit their jurisdiction to this point of view, they were free to refuse their consent for any other reason or for no reason at all, and that they were not bound to give any reason for their refusal.

Acting on this advice, and because the board of health desired to be governed by the wishes of certain persons who had signed the remonstrance, the board, without any discussion or argument among themselves, and without stating their individual views, passed a resolution that the application be denied, and this resolution was

carried by the votes of four of the members of the board of health, the chairman not voting; the board consisting of five members.

There are but two incorporated cemeteries in the town of Bloomfield. One is the old cemetery known as the "Bloomfield Cemetery Company," of which the larger part is within the limits of the borough of Glen Ridge, and about one-third of whose area is in the town of Bloomfield. The other is a Roman Catholic cemetery.

10. COPY OF ARGUMENT OF COUNSEL FOR PETITIONERS.

In the matter of the application of John H. Francisco and others for consent to locate a new cemetery in town of Bloomfield, in county of Essex. Argument of Halsey M. Barrett, attorney for petitioners.

In the case of *Gavett v. The State*, 20 Vroom 162, Judge Knapp, stating the opinion of the court, declares: "The object of the legislation constituting boards of health and marking out their duties was to prevent nuisances in conservation of the public health." And declares that "this purpose is the single object of their creation and sole guide in action." He further says on page 103: "The purpose which the legislature had in view in creating boards of health was to supply additional means to prevent disease and discomfort such as might arise from contamination of air, water or food."

Hutton v. Camden, 10 Vroom 132. The ignorant, hasty and indiscreet conduct of this board of health is an admonition not to be disregarded, against listening to any claim that, under any circumstances, the power of ultimate judgment over the law and facts, with respect to the rights of persons or of property, can be safely confided to other hands than those of the ordinary judicial tribunals. See *Westcott v. Middleton*, 16 Stew. Eq. 473.

A board of health, whether it be a State or local board, is the creation of the State with its powers and duties either expressly defined by the statute or necessarily implied therefrom. Its powers and jurisdiction relate exclusively to questions affecting the health and sanitary condition of the public, whose health guardians they are. Their powers, conferred by statute, are full and ample in this respect. While they are an independent board, they are also a subordinate board, appointed by the local municipal authority to perform such duties as the legislature has imposed upon them. They have no right to legislate upon any subject not pertaining to the health and sanitary condition of their locality. They have no right, in legislating upon any subject properly within their jurisdiction, to consider the same or to determine their final action by any other consideration than the health of the locality.

The act respecting cemeteries, in its thirty-third section, requires that the consent of the municipal authorities and of the board of health of the city, town, township or borough in which it is proposed to locate or enlarge a cemetery, shall first be obtained, and if such consent be refused an appeal is given to the State Board of Health.

The same act provides that the municipal authorities and the board of health may enter into and upon any cemetery or burying-ground within the limits of said municipality, and examine into the condition of the same, and ascertain whether the laws relating to it are duly observed. Also provides, in section 35, that the municipal authorities may prevent further interments in existing cemeteries where such further interments are dangerous to the public health.

From all of these references to the statute it is obvious that, with respect to the location of a cemetery in any town of this State, the consent of the local board of health to such location is required upon only one theory, and that is that such cemetery as proposed may prove to be a public nuisance and injurious to the health of the community.

The question of the need or desirability of an additional cemetery in this town is to be determined by the town council, the governing body, and then the concurrent consent of the board of health is required; but that concurrent consent is only required from them as the guardian of the health of the community, and that is the only question for them to determine. They have no right to constitute themselves a board to review and veto the action of the town council; they have no jurisdiction to sit as a Court of Appeals upon the action of the town council; they have no right to consider the petitions of taxpayers or citizens respecting such a matter unless such petitions and views are based upon questions of public health.

The question before this board to-night is whether the location of a cemetery upon the premises described in the petition of Francisco and others will be a public nuisance and injurious to the health of the inhabitants of the town of Bloomfield, and that is the only question which you have a right to consider or determine. The consent of the town council, the governing board of this municipality, has disposed of all other questions relating to this application, and that consent is to take effect upon receiving a consent from this board.

Will the location of the cemetery as asked for in this petition be a public nuisance? The courts have held that a burial-ground, even when near dwellings, is not necessarily a nuisance, and its use can only be enjoined on clear proof of probable injury. Amer. Ency. of Law, vol. 3, p. 55.

In the cases cited in support of this statement it is stated: "If, however, it can be clearly proven that a place of sepulture is so situated that the burial of the dead there will injure either life or health, by corrupting the surrounding atmosphere or the water of wells or springs, a court will grant injunction relief;" and the court says: "Burial places for the dead are indispensable; neither adjoining proprietors nor the public can complain unless it is shown that, from the manner of the burial or some other cause, irreparable injury will result to them. It is quite an error to suppose that, of itself, a burying-ground is a nuisance to those living in the vicinity; much depends upon the mode of interment, whether it can be justly asserted that in any event injury will result from it. The particular locality and its surroundings must also be considered." And in other cases the courts have said: "A repository for the dead is indispensable, and wherever located it must, from necessity, be in the vicinity of the private property of some one who might prove its market value injuriously affected thereby. Cemeteries are not necessarily even shocking to the senses of ordinary persons. Many are rendered attractive by whatever appropriate act, art and skill can suggest, while to others of morbid or excited fancy or imagination they become unpleasant and induce mental disquietude from association exaggerated by superstitious fears. The law protects against real wrong and injury combined, but not against either or both when merely fanciful. The human contents of these graves cannot, as they lie buried there, offend the senses in a legal point of view. The memorial stones alone affect the senses, and the same would result to the superstitious, though nothing human lay beneath them. If a burial-ground is, under the circumstances, a private nuisance, then it is also a public nuisance to every traveler who passes the road, and so also is every soldier's monument in the country."

No one will have the hardihood to suggest that the location of the proposed cemetery will be either a public or a private nuisance. If this board were compelled to designate thirty-four acres in the town of Bloomfield to be used for cemetery purposes, it may well be doubted if any other location could be chosen so free from objection as the proposed property. If this board shall officially determine that a due regard for the health of this community requires that they shall withhold and refuse their consent to the location of this cemetery, what can you say respecting the location of other cemeteries in this town? Would you not be compelled, by the same consideration for the public health, to declare the Bloomfield cemetery, which is surrounded by private dwellings, also a public nuisance, and, under the power given you by the statute, prohibit further interments therein? The law says that there may be three cemeteries and not more in any municipality of this State, and the courts have said that burial places for the dead are indispensable. Neither this board nor the town council have a legal right to change this law and say that not more than one or two cemeteries shall exist in this town; nor have they a right to refuse this present application, in order that a consent and permission may be granted some time in the future to some other applicant. The Gillespie estate is a taxpayer of this town. They have a right to sell their property for any lawful purpose, and where such lawful purpose requires the consent of the municipal authorities and the board of health, they have a right to expect and demand, even, that such consent shall be given unless strong prevailing legal reasons exist for withholding such consent. You have no right to say that the Gillespie estate shall not sell its land for the purposes of a cemetery, in order that some time in the future some other person or estate may sell its land in this town for such purpose. You have no right to be influenced by prejudice or partiality. You are to determine this application on its merits alone, and are only authorized to withhold this consent on reasonable and legal grounds, giving your reasons therefor, in order that such refusal may be reviewed by the State Board of Health, to which, by the statute, an appeal may be taken. The question of the residence or non-residence of the applicants cannot affect you, for the statute places no prohibition of this sort over the location of cemeteries. The question whether interments shall be made of the bodies of people who shall die outside of this town cannot affect you, for the law makes no such prohibition. The question of whether the bodies of the dead shall be carried through this town for interment in the cemeteries of this town cannot affect you, for you have no power or either legal or moral right to regulate this, except as to the manner, from the point of health alone. Even the dead have some rights which the living are bound to respect, and one of these rights is the right of interment or sepulture.

As to whether this cemetery, when located, shall be properly conducted and maintained in such a way as not to be either a public or private nuisance, the law gives you the fullest and amplest power. Both you and the municipal authorities, as before stated, have a right personally, or through your inspectors and agents, to at all times enter upon the property of any cemetery association, and satisfy yourselves that the business there conducted and the manner of interments is in accordance with law and not injurious to the public health. You are authorized by law to pass ordinances, general in their character and reasonable in their terms, regulating these matters, and not in conflict with the State law relating to the same subject-matter.

It may be urged that if this cemetery shall be located upon the premises described, the sale of lots in other existing cemeteries may be affected thereby. I do not believe

there is any force in this objection, but if there were force in it, and if you believed that that would be the result, you would have no right to be influenced in your decision of this application by such a fact. The law contemplates that there shall be as many as three cemeteries in the town of Bloomfield, and such a contemplation necessarily involves the choice as to the place of interment or purchase of burial lots, and if persons compelled to acquire a resting place for their dead cannot afford to purchase burial places in one cemetery, it is perhaps well that they should be able to purchase lots in another cemetery in this town, near enough to them for convenient access, and not be compelled to buy a lot in a cemetery in some other community.

In order that you may fairly judge of the merits of this application and of the sentimental and groundless character of the objection thereto, I ask you to consider this question: Suppose that Mr Francisco and his associates had desired to locate a cemetery upon the property belonging to the Gillespie estate, which lies directly east of the property in question and across the line in the township of Belleville. Do you suppose for one moment that either this board of health or the citizens of this town would have taken any interest in such application? Would you or they have presented any protest to the town committee of Belleville against granting such application? Would you or they have considered that such a cemetery, located a few hundred yards east of the proposed location in this town, could or would be an injury to the health of this community? Would people of this town have industriously circulated petitions praying the Belleville authorities and the Belleville board of health not to grant such application? And yet you and they would have a right, both legal and moral, to have made such a protest; and if you could show and demonstrate that the location of such a cemetery on the border line of this township would prove an injury to the health of the people of this town, and would become a public nuisance, you would have a right, under the laws of this State, to apply to our courts and to secure an injunction restraining the applicants from maintaining such a cemetery there.

While boards of health have jurisdiction only within the municipality which they represent, the courts have jurisdiction throughout the State, and the board of health of one town, or State at large, has a right to apply to the court to prevent the creation of a public nuisance in an adjoining community, which will prove a public nuisance to the public of their own community.

The Disposal Works in East Orange were enjoined from carrying on their operations in such a manner as to become a nuisance in this town. Every municipality has a right to be protected, not only against nuisances erected within its own borders, but also against nuisances conducted beyond its limits which are, nevertheless, nuisances to that town.

Unless, then, you shall find as a matter of fact that the location of a cemetery upon Franklin avenue, on the remainder of the Gillespie farm, located in the township of Belleville, would be a public nuisance and a public injury to people of this town, you will not be justified in finding as a matter of fact that the location of the proposed cemetery will be a nuisance and an injury to the people of this town, unless you shall also find as a matter of fact that the few hundred yards in difference between such two locations, from the nature of the soil, creates a distinct difference, which renders one objectionable and the other unobjectionable, and when you put this question to yourselves fairly and undertake to answer it, as you are bound to answer it, on the facts and according to your honest judgment and convictions, I am

ground, upon application in writing for that purpose made; and in case of the refusal of the municipal authorities and local board of health to grant the same, then the person or persons making application as aforesaid may apply to the State Board of Health, which shall have power to reverse the decision of the local authorities and grant the application; and in case the local authorities grant the permit to locate or enlarge any cemetery or burial-ground, *and the same shall be deemed objectionable by the inhabitants of the city, town, township or borough where it is proposed to locate*; then ten citizens, freeholders thereof, may apply to the State Board of Health, which shall have power to reverse the decision of the local authorities and prohibit said location or enlargement."

It will be observed that the statute is entirely silent as to the reasons which shall prevail upon either the municipal authorities or the board of health in reaching their decision to grant or refuse the application. As far as the Legislature have expressed themselves, the local authorities and the board of health are equally untrammelled in their consideration of the application, and I think that a perusal of the entire act, of which the quotation above given is only a part, leads to the conclusion that the powers of the local authorities and the board of health are coincident and co-equal throughout. For example, by section 3 the municipal authorities are authorized to regulate interments, disinterments, &c., in any cemetery within their corporate limits, and are given authority to enter into and upon any such cemetery and examine into its conditions and whether the ordinances regulating the same are duly enforced. By section 5 of the supplement of 1885, *supra*, the municipal authorities or board of health are given authority at all times to enter into and upon any cemetery within the limits of said municipality, and examine into the condition of the same and ascertain whether the laws regulating it are duly observed. Among the regulations governing such cemeteries are those in section 12 of the act approved April 9th, 1875, preventing the destruction, mutilation, defacement, injury or removal of any tomb, monument, gravestone, building or other structure placed in the cemetery. I see no reason why the visitatorial power of the board of health under the act does not extend to and include the ascertainment whether these provisions, which are entirely distinct from questions of health, are or are not observed. It is not questioned, I believe, that the municipal authorities are unrestricted as to the reasons which may induce them in deciding upon the application. It is a universally admitted principle that municipal authorities, in determining questions of this kind—*i. e.*, giving or refusing the municipal consent to the location within the municipality of any new enterprise, such as the right to lay a street railroad upon the surface of the streets, or to lay gas or water-pipes below the surface thereof—have a discretion which, if honestly exercised, is not assailable. Now, I believe that the Legislature, in the act under consideration, intended to impose a similarly unlimited discretion in both the local authorities and the board of health in passing upon the application for a new cemetery. Certainly nothing can be found in the language of the act which in any way confines the judgment of either body. On the contrary, beside being expressly devoid of any restriction or limitation, the provision for an appeal to the State Board of Health, in the event that ten freeholders deem the project objectionable, would seem to make the issue as broad as the word "objectionable," and not confine the question to a consideration of sanitary problems, either in the initial stages of the inquiry or on the appeal to the State Board of Health. This is the more obvious when section 8 of the same act is read, which provides expressly that any municipal authority within whose limits any such cemetery or burial-ground is

situated, or any State or local board of health, may file a bill in the Court of Chancery asking relief *whenever any cemetery or burial-ground is dangerous to the public health*, and it is inadvisable that any further interment be made therein. Here is a limit to the exercise of the permitted act by either the local authorities or the local or State Board of Health. Had the Legislature intended to confine the action of one or the other of these bodies to questions of health in granting or refusing the application, they would have expressly said so. Should an attempt be made to locate a cemetery without the consent of the local authorities and board of health, an injunction would undoubtedly issue to prevent it, and this solely because of the absence of the required municipal consent. No question of danger to health would be relevant in such a suit. On the other hand, after having obtained the consent, the local authorities or the local or State Board of Health are, by the statute, expressly confined to questions of health when seeking to prevent further interment under section 8, above referred to.

My point is that there is nothing significant in the selection of the local authorities and the board of health as the bodies whose consent is a prerequisite to the location of the cemetery. In New York State, in certain counties, the Legislatures have required a similar consent of the county supervisors. In Wisconsin the consent of the municipal authorities is required. In Ohio the question is submitted to the vote of the people in the municipality. In New Jersey, at the time of the enactment under consideration, there were in existence, under other and distinct legislation, bodies known as local and State Boards of Health, and out of abundant caution the Legislature saw fit to require the consents of the local authorities and of the local board of health. They might just as well have chosen any other tribunal. The board of health is at least a *quasi* corporation, and possesses a power by the act in question which nowhere can be found in the act constituting it. The situation, therefore, seems to be very similar to that adverted to by the Supreme Court in *Hubbard v. Paterson*, 16 Vr. 310, where the board of health of the city of Paterson passed an ordinance regulating the material and thickness of buildings. Because the charter of the city of Paterson established a board of health, and conferred upon it powers for the preservation and promotion of health only, the court concluded that the only inference deducible was that the board was charged solely with the execution of such sanitary measures as tended to prevent or diminish disease. In other words, the right to make ordinances granted by the charter concerning buildings, residing in a subdivision of the one hundred and fiftieth section of the charter, which by its terms only applied to the preservation and promotion of health, the necessary inference from the decision is that, had not the charter of the city of Paterson expressly limited in the one hundred and fiftieth section, the function of the board of health thereby organized, to questions of health, the subsidiary provision in that section permitting its regulation of buildings would have been entirely regardless of the question of health.

Now, it must not be overlooked that there are many other problems than that of health alone, in the contemplation and maintenance of a cemetery in any locality. As was stated in the case of *Charleston v. Wentworth Street Baptist Church*, 4 Strobb. 306:

"Reverence for the dead, decency, public health, comfort and convenience, are all concerned in the proper regulation of burial. The evils resulting from its neglect are, principally, to be apprehended in the crowded population of cities, and it, therefore, most properly pertains to municipal government. * * *

"This authority is expressed in the very terms of the grant. In what can the wel-

fare and the convenience of the corporators be more concerned than in this? May not the city council regulate the time of burial so that it shall not be done at unseasonable hours of the night? May it not protect the health of the citizens against the noxious effluvia of decomposition, by ordering the manner of interment? And, most of all, may it not enforce a becoming reverence for the dead, and maintain and cherish that sentiment among the citizens which familiarity and neglect have so great tendency to impair, by prohibiting interment in private gardens and yards, and by-places of the city? and shall the city council be restrained in the exercise of this power, so necessary to the public welfare, and so salutary in its moral influence, by a private interest? Shall the owner of a city lot be upheld by the court in his appeal to vindicate his absolute dominion in the soil, and his right to use it as he pleases? Such a claim would equal, in intensity of selfishness, the example put by Lord Bacon, of the man who would set his neighbor's house afire to roast his egg. * * *

"In deciding the question of the power of the city council to pass the ordinance, the necessity or expediency of its enactment has not been considered. That has been assumed. If the power exists the court has no jurisdiction to control the discretion of the city council in its exercise, provided it be exercised consistently with the laws and constitution of the State. No violation of either is apparent in the provisions of the ordinance. It is not necessary to the existence of the power that there be a present occasion for its exercise. It is sufficient that a future emergency may demand it. The power to make every and any ordinance or regulation that may be necessary, will be supplied from the grant of the charter, when circumstances may call for its exercise. The province of the court is merely to declare whether the power is granted. It is sufficient to establish the grant that the power is or may be necessary for the welfare and government of the city. The city council has exclusively the authority to determine when the occasion may exist for its exercise and the manner in which it should be applied. If an ordinance be exceptionable on these grounds, an appeal against its enforcement lies only to the corporators."

The Supreme Court of Wisconsin, too, in the case of *Pfleger v. Groth*, 79 N. W. Rep. 19, speaking of cemeteries, adverts to the fact that cemeteries are necessary, and rightly regarded as sacred places. They ought not to be considered injurious to people of average sensibilities and intellect from the mere fact that they are the resting places of the dead. With the customarily laid-out walks and drives, the mounds, the flowers and shrubs, the monuments and inscriptions, and many other incidents that may be mentioned, characterizing a modern cemetery, they are in many respects places of beauty as well as of inevitable decay.

All such problems enter into the decision of applications like the present one. Not only are questions of health to be observed, but the elements of aesthetics, of convenience, the relation of the cemetery to other public improvements, bearing in mind the fact that railroads are unable to condemn cemetery properties, the universal freedom of the land from taxation, the adaptability of the site for the proposed uses — all these and many other problems enter into the question, and the statutory tribunals have, in my judgment, a right to consider them all before granting the necessary permission to locate the cemetery. They must bear in mind that when three cemeteries exist the right is exhausted, and it is very greatly to the interest of the municipality to be certain that the projected location will be available and useful.

For these reasons I conclude that the board of health of the town of Bloomfield have a discretion in the premises similar to that enjoyed by the local authorities, and

that they are not confined, in considering the application, to mere questions of health or sanitation.

I may say, before closing, that I have been favored with a copy of the opinion of the Hon. Samuel H. Grey to Halsey M. Barrett, Esq., which reaches the opposite conclusion, and with very great deference thereto, as well as to the learning and experience of Mr. Grey, I find nothing in it to change the views hereinabove expressed.

Yours very respectfully,

R. H. McCARTER.

DR. HARRY E. RICHARDS, Bloomfield, N. J.
NEWARK, N. J., April 8th, 1901.

14. COPY OF COMMUNICATION FROM REV. M. S. WATERS.

To the New Jersey State Board of Health, Trenton, N. J.:

GENTLEMEN—As I understand that an appeal from the action of the board of health of Bloomfield, N. J., in refusing to ratify the action of the common council of Bloomfield, N. J., in granting a franchise to a company calling itself Lutheran, to own, control and operate certain lands lying partly within the limits of the town of Bloomfield, N. J., as a cemetery, has been presented to your Honorable Body, and as I was a petitioner for the granting of said franchise, a statement made by me to you may enable you to act more intelligently in the case. My signature to the said franchise was obtained under the following conditions: A man well-known to me as a pastor of a Lutheran Church in New York City, and a member of the same club of ministers, meeting in New York City once a month, therefore, a man in whom I had the highest confidence, came to me and informed me that a company of Lutheran men, in New York City, were anxious to do something for the welfare of the Lutheran Church in the way of establishing a cemetery to be known as a Lutheran cemetery, and who, after securing for themselves reasonable profits, would devote the remainder of the profits to the use of the church. Under these conditions I was induced to attend a meeting of the township commissioners at Belleville, where these gentlemen had first applied for a franchise, and later to sign my name to the petition for the franchise in Bloomfield. It was further represented, prior to my appearance at Belleville, that a certain amount of stock—\$500 worth was named—was to be given to my congregation as its share of the benefits, and later a member of the company named in the prospectus, issued by the company as treasurer of the Teutonia Lutheran Realty Company, called at my residence, 162 Bergen street, Newark, N. J., leaving the petition for the franchise at Bloomfield to be signed by me, and stating to my wife as he was about to leave the house, myself being absent, that I was to receive \$500 worth of stock in my own name for appearing as an applicant for the franchise. As this was represented to me by both these gentlemen as a perfectly honorable matter, I did not think that any wrong was intended by the offer of this sum of money, nor do I now wish to charge either of these gentlemen with intention to do anything unlawful.

I heard nothing further from the affairs of this company, except, as in an indirect manner, the clergymen who had first come to me talked to me concerning the offer that had been made to my wife by the treasurer of the said company, until March the 5th, 1901, two gentlemen, calling at my house, inquired concerning the proposed

cemetery. I told them that all I knew of it was that I had signed the application for a franchise, and that the matter was before the board of health of Bloomfield for its ratification of the action of the common council granting a franchise (these facts being known to me through the public press). They expressed astonishment, and showed me a prospectus or circular letter (a copy of which is hereto added) issued by a company calling itself the Teutonia Lutheran Realty Company, with offices at 776-778 Broad street, Newark, in which the advantages of investments were advertised, investments solicited, with subscription blank inclosed, upon the basis of the establishment of the proposed cemetery at Bloomfield, and in which it was distinctly stated in large letters that "All legal requirements have been fulfilled," and to which prospectus or circular letter, among other names, my name appeared as a member of the advisory committee, the name being used without my advice, consent or knowledge, concerning which I would like to state that I would not have given my consent to a use which makes me appear, in my opinion, as subscribing to a statement which was not true in fact, and to other statements therein contained of which I had no knowledge. I did not get to examine this circular only so far as to read my name contained therein, as the gentlemen took it away with them. On Thursday of the same week I received a card from a Henry G. Plumb, signing himself secretary of the St. James L. Cemetery, asking me to come to a meeting of the said company at their Newark offices, 776-778 Broad street, city, on Friday afternoon, March 6th, 1901, at 3 o'clock. At that meeting, and at a social meeting immediately following, wherein all the members of the St. James L. Cemetery who attended the called meeting were present, and immediately following the said social meeting, certain statements were made which induced me to believe that the interests of myself, my own particular church and the Lutheran cause in general, would be best subserved by my withdrawal from any and all connection with said company, and when, on Monday, March the 11th, a number of these prospectuses or circulars were sent to me and I had carefully examined them, I found, to my utter amazement, that my name had been used in the manner above stated, I determined to sever any and all connection between myself and said company which might have been assumed on account of my signature to the petition for franchise. But, before taking any decisive action, I called upon three of the most prominent Lutheran clergymen in New York City, to see whether they knew anything of the proposed cemetery association, to find that two of them—men who have headed the Lutheran Church in New York City for almost a generation—knew nothing of the matter save what one had seen in the prospectus and the other in the newspapers; the third had been induced to appear at White Plains, New York, in the same capacity in which I had gone to Belleville, New Jersey, and, therefore, there was no organized body of Lutherans of any kind whatsoever back of this association, so far as I could ascertain, save only those gentlemen who had formed and called themselves the above-named Teutonia Realty Company and the St. James L. Cemetery.

Therefore, believing then, still believing now, that my name had been used in a manner calculated, in my opinion, to mislead, and having come to believe, as I do still believe, that the use of the word Lutheran in said connection is calculated to work more injury than good to the cause of the Lutheran Church, I notified both the company privately and the public through the columns of the "Newark Evening News" of March 14th, 1901, which is hereby added to this statement, my entire connection with said company was severed; and as my interest was secured through partial presentation of facts, viz., I was not told that it was to be a regular stock com-

pany, with investments to be invited, nor was I in any manner whatsoever told that such a prospectus was to be issued, I feel that it is only fair and right for me to make these facts known to your Honorable Body. As a petitioner for the cemetery franchise, I desire to say that I no longer wish to have the franchise ratified by the Bloomfield board of health or to have your Honorable Body set aside its action. My personal wish is that if you find it within your jurisdiction you should refuse the appeal from the action of the board of health of Bloomfield, New Jersey, in refusing to confirm the action of the Common Council of Bloomfield, New Jersey, granting a franchise to the Lutheran Association. Inquiry of several of the most noted clergymen of the Lutheran Church, New York City, and of members of my own congregation in this city, has led me to believe that the best interests, especially in a moral sense, of the Lutheran Church would be subserved if such a cemetery under these circumstances were not allowed to exist.

And finally, I wish to state that I am acting upon my own volition entirely in making this statement. None of the opponents of this franchise are known to me, nor have I conferred with any parties directly interested in the case *pro* or *con*. And all the facts herein set forth are, to the best of my knowledge and intent, true. And as to my character, I refer you to the following gentlemen, who have known me personally during the now almost eight years of my ministry as the pastor of the Grace English Lutheran Church, in this city: The Hon. Cortlandt Parker, the Hon. W. H. F. Fiedler, both of this city, and the Rev. G. F. Krotel, D.D., LL.D., 8 Hamilton Terrace, New York City. And I would like to state further that I am willing to answer any and all questions concerning this whole matter if called upon to do so by your board.

Very respectfully,

M. S. WATERS.

Wednesday, March 20th, 1901.

(ADVERTISING CIRCULAR OF THE TEUTONIA LUTHERAN REALTY COMPANY.)

Safe and profitable investment. Seven per cent cumulative preferred stock, secured by a first lien on real estate. Common stock as a bonus.

New Lutheran Cemetery, for Essex, Hudson, and parts of Passaic, Union and Morris counties, including the following cities and towns: Jersey City, Harrison, Newark, Arlington, Paterson, Bloomfield, Elizabeth, Morristown, Hoboken, Franklin, Passaic, Belleville, Montclair, Irvington, Oranges, Rutherford, and also a large part of New York City; showing that there are unusual opportunities for a well-conducted Lutheran Cemetery, situated within a reasonable distance of the above-named places. With the indorsement and co-operation of all the prominent Lutheran churches, a large patronage is certain, and the complete success of the project is only a natural consequence. Knowing that a cemetery owned and controlled by well-known Lutherans, conducted upon the best modern plans, will appeal to investors, we herein submit the following prospectus for your consideration. In choosing the site for the new place of burial and in adopting plans for its arrangement and management, the founders proceeded with the utmost care. No weathers need hinder burials and every modern facility will be provided.

The cemetery is located in Bloomfield and Belleville townships and is easy of access by the best macadamized roads of New Jersey. Trolley cars of Bloomfield and Belleville run within a short distance, and it is the intention of the company to

establish an automobile stage connection, so that patrons and visitors can ride direct to the cemetery entrance. Though easily reached, it is far enough from settlement to be secure from disturbance and encroachment. The natural advantages of the site are many, the situation is notably beautiful, for around it spreads a splendid panorama of mountains, a large lake, a river and range after range of scenic hills on every side. The Teutonia Lutheran Realty Company has acquired the title to over a hundred acres and holds options on others, amounting to nearly two hundred and fifty acres. All legal requirements have been fulfilled. Sale of lots will be immediate and rapid. Even now purchasers are waiting. It is an assured fact that returns will begin at once. The active interest of the Lutheran churches will confer upon this organization an immense advantage over others. Each acre will yield a large profit, based upon the minimum price of lots, one-half of the gross receipts will be the profit of the Teutonia Lutheran Realty Company. These facts thus briefly summarized will indicate to investors the abundant basis for ample security and excellent profits. The safety and large profits of investment in cemetery companies have been absolutely demonstrated. Their security is made evident by the ready manner in which all such shares have been taken up and by the fact that purchasers often even advertise for them. As sources of income they are unsurpassed. The shrewdest and most famous financiers eagerly buy this class of stock. The capital of the company is invested in and represented by land, which has been bought at a reasonable figure. Real estate, in the line of the best growth of New Jersey, is always a safe investment.

Cemetery lands are the very best in point of security. There are three reasons. First. Like other lands near thickly-settled communities they never depreciate but increase in value, and in the case of cemetery lots the enhancement is more rapid than with others. Second. They are not subject to taxation; thus characterizing cemetery investment as the least expensive to carry of all land investments. Third. They cannot be taken for the individual debts of the owners, still further lending to the element of safety. The results are what may be expected. For example:

"Woodlawn Cemetery," at the time of the organization of the company, sold its shares at twenty dollars. Now the stock cannot be bought at one hundred and seventy-five dollars per share. "Kensico Cemetery," organized in 1891, sold its stock originally at twenty-five dollars per share, and to date has sold at one hundred and fifteen dollars per share. "Druid Ridge Cemetery," opened up in Baltimore, Md., June, 1898 (only two years ago), put its shares on the market at twenty-five dollars per share. To-day it is worth fifty. In Philadelphia, "Somerton Hills Cemetery," organized in May, 1899, sold its stock originally at twenty-five dollars per share. To-day it is worth sixty dollars a share, and is difficult to get at that price. Every city cemetery that has been in existence more than a year has paid a dividend. Woodlawn pays eleven dollars, Kensico five. Somerton Hills, Philadelphia, has already declared a dividend of six per cent. Those who are unquestioned judges declare that there is a strong demand for a Lutheran cemetery, laid out according to the best designs of landscape architecture, in the before-mentioned locality. The Teutonia Lutheran Realty Company is capitalized at two hundred fifty thousand dollars, fifty thousand dollars of seven per cent. cumulative preferred stock and two hundred thousand dollars of common stock. All money received from the sale of the preferred stock goes into the treasury, to be used for the purchase and improvement of the land, and, as has been pointed out, is a first lien on the company's property, both as to the principal and cumulative dividends. The common stock given as a bonus to buyers of preferred stock will also become very valuable. The total issue of fifty

thousand dollars worth of cumulative stock is hereby offered at par, fifty dollars per share, redeemable by the company on the second Monday in January, 1906, or any second Monday in January thereafter. At any time this preferred stock may be exchanged at its par value for cemetery lots. Those who desire to subscribe for a part of the fifty thousand dollars worth of preferred stock issued by this company, and not yet allotted, may do so by making use of the subscription blanks inclosed. The right is reserved to reduce the amount of any subscription or to refuse it entirely. Personal interviews willingly granted. Fulllest information cheerfully given. The officers are well-known Lutherans and business men of New York City, and will have an advisory committee of representative ministers and laymen from Lutheran congregations, thus guaranteeing the faithful performance of duties and the competency of the company. Zebulon G. Wood, president; George F. Sturken, vice-president; John C. Witte, treasurer; Henry G. Plump, secretary; Otto E. Schaefer, auditor. Advisory committee, Rev. J. F. W. Kitzmeyer, Rev. E. W. Fulper, Rev. E. E. Neudewitz, Rev. M. S. Waters, Rev. F. C. Krapf.

Solicitude for their dead is a prominent characteristic of Germans and German-Americans. No nationality, no other descendants, exceed in this, the sturdy people of the Fatherland and their children. They expend as much thought upon their last long home as upon the residence in which they pass the days of life. With them the living often visit the dead. Indeed, in many of their families, there are days of the year, anniversary days it may be, which are sacred to that very purpose. These good people have never been granted the opportunity of having near New York or its immediate neighborhood a truly beautiful home for their dead. It is only in comparatively recent days that the idea has arisen to make God's Acre at least as beautiful as the city park. A few have had the temerity to cease burying in Lutheran cemeteries and to select those of less severe and less plain design. But still the desire to bury with their own kinsmen has always been manifest. In the year 1851, Lutheran Cemetery of Middle Village, L. I., was founded by several Lutheran churches of New York. At the present the lowest prices are \$15 for a single grave of the kind called public. Lots sell at \$1 per square foot, the minimum price. During the year 1899 there took place in this cemetery over 12,000 burials! Viewing the situation over, we are permitted but one conclusion. A cemetery which would both gratify the desire of Lutherans to repose at last with those who in life shared their own *Gemueth*, and which also would provide a city for the dead second to none in beauty of plan, would meet with most substantial encouragement and success. The patrons who will make it a success are an earnest-minded and substantial people.

STATEMENT FROM REV. MR. WATERS.

Circulars have been issued in the name of the Teutonia Lutheran Realty Company calling attention to a "New Lutheran Cemetery," and worded in such a way as to give the reader an impression that the company had already located a burial place in Bloomfield and Belleville townships. As the board of health of Bloomfield rejected an application for a cemetery in that township, and as the Belleville authorities have granted no such permission, the appearance of the prospectuses has caused Rev. M. S. Waters, of this city, who is named as a member of the "church advisory board," to repudiate his connections with the project.

The situation with regard to the cemetery project is a rather mixed one. Some time ago John H. Francisco and others received from the Bloomfield town council the right to locate a cemetery in that town on a tract of land, thirty-two acres in extent, bordering on the Belleville line. It was stated that the proposed cemetery would also comprise a portion of the adjoining land in Belleville. Under the law it is necessary to secure the permission of the health authorities as well as the governing body of a municipality before a cemetery can be located, and the Bloomfield project received a setback by the failure of the health board of that place to grant a permit.

As the statutes provide that an appeal may be taken to the State Board of Health from the decision of any local health board, the promoters of the cemetery scheme did not stop at the adverse opinion, but, on the contrary, had Halsey M. Barrett, their counsel, prepare an appeal, which is to be forwarded to the State Board to-day. The petition which the town council granted and the town health board rejected was made in the name of individuals, of whom Rev. Mr. Waters was one.

Pending the outcome of the controversy the Teutonia Lutheran Realty Company was organized, with Zebulon G. Wood, president; George F. Sturken, vice president; John C. Witte, treasurer; Henry G. Plump, secretary, and Otto E. Schaefer, auditor. In the prospectus issued by the company it is said that "the officers are well-known Lutherans and business men of New York City." It is further proclaimed that they will have "an advisory committee of representative ministers and laymen from Lutheran congregations, thus guaranteeing the faithful performance of duties and the competency of the company." In addition to Rev. Waters the advisory committee was given in the circular as consisting of Rev. J. F. W. Kitzmeyer, of Newark; Rev. E. E. Neudewitz, of Jersey City; Rev. E. W. Fulper, of Hoboken, and Rev. F. C. Krapf, or Elizabeth.

Without specifically stating that the Teutonia Lutheran Realty Company was organized to conduct a cemetery, the circular issued under the company's name points out the advantages of a cemetery property as an investment and offers for sale seven per cent. cumulative preferred stock, with common stock as a bonus. Referring to the site "for the new place of burial," the circular declares that "the cemetery is located in Bloomfield and Belleville townships," near trolley cars, and that the company proposes to establish an automobile stage connection, "so that patrons and visitors can ride direct to the cemetery entrance." It is further set forth that "The Teutonia Lutheran Realty Company has acquired title to over a hundred acres and holds options on others, amounting to nearly two hundred and fifty acres." Following this in large letters is the sentence, "All Legal Requirements Have Been Fulfilled."

Much space in the circular is taken up in telling "Why Cemetery Property is a Safe Investment," and the exemption of such property from taxation is cited as one reason. The capitalization of the realty company is given as \$250,000, of which \$50,000 is preferred, and stress is laid on the fact that clergymen are interested in the project.

Rev. Mr. Waters, who is pastor of Grace English Lutheran Church, stated to a "News" reporter to-day that he did not know his name was to be used on such a circular, and that, because it had been, he withdrew from all connection with the cemetery company. He explained that a short time ago he was asked by a man who was interested in the plan to go to Belleville, where the company first proposed to locate, and say to the people of that town that it was a respectable concern. This he

did on the strength of the representations made. Afterward, when the company changed the proposed location of the cemetery to Bloomfield, he was asked, and consented, to become one of the petitioners for the franchise in that town. Continuing, he said:

"As it was to be a church cemetery, I was to be a member of the advisory committee for the disposal of the funds which, it was represented to me, would accrue to the churches in this vicinity. This was the last I heard of the cemetery until a few days ago, when a man came to me to inquire about the concern, at the same time showing me a prospectus with my name attached, together with an order-subscription blank.

"I was, of course, utterly astounded, as I had not known of the prospectus, had never seen its contents, nor had I given permission to anybody to use my name in any such connection. I have withdrawn absolutely from any and all connection with the company."

Rev. Mr. Waters went on to say that he wished to repudiate any recommendations he might have made concerning the company, as his connection with the project had been obtained by a partial presentation of facts.

Mr. Barrett, counsel for the petitioners for the cemetery, said to-day that he understood that the Teutonia Lutheran Realty Company was a separate corporation from the proposed cemetery association. The latter, he said, could not be organized until the necessary permits to locate a cemetery had been granted. The realty company, according to the lawyer's understanding of the situation, was formed to deal in real estate near the site of the proposed cemetery, but Mr. Barrett said he did not know whether the company would be financially interested in the cemetery.

The circulars of the Teutonia Lutheran Realty Company give the concern's address as 776 and 778 Broad street. On a door leading to one of the offices in that building appears the company's name, and above it is painted the words, "St. James Cemetery, Lutheran."

When a "News" reporter called at the office this morning none of the officers of the concern were in, and it was said by another tenant of the building that the company "was apparently just getting settled for business."

15. COPY OF PETITION TO LOCAL BOARD OF HEALTH OF THE TOWN OF
BLOOMFIELD.

To the Board of Health of the Town of Bloomfield:

GENTLEMEN—We, the undersigned, residents and property-owners of the town of Bloomfield, do hereby respectfully request that you will grant the petition of John H. Francisco and others for consent to the location of a cemetery on the south side of Franklin avenue, in the town of Bloomfield, as prayed in said petition.

We believe that the location of a cemetery on the tract described in said petition will not be an injury to the adjoining property, or to that portion of the town, but that, on the contrary, a well-kept and attractively laid-out cemetery would be of advantage to the adjoining property and to the neighborhood.

Yours respectfully,

Alexander McNair, Louis T. McNair, John H. Herman, Henry Herman, Lucy G. Francisco.

Dated March 1st, 1901.

16. COPY OF PETITION OF PERSONS OPPOSED TO GRANTING CONSENT TO THE
LOCATION OF A NEW CEMETERY IN THE TOWN OF BLOOMFIELD.

To the Honorable Board of Health of Bloomfield:

GENTLEMEN—The undersigned respectfully ask that the application for the location of a cemetery within our town, which is now before your board for consideration, be declined.

There are two cemeteries in our town, one Protestant and one Roman Catholic. These two, we think, are sufficient for present as well as future needs. The applicants are not residents of Bloomfield, and the application made by them for a cemetery elsewhere was refused. Cemeteries are not of themselves desirable, and are justified only because of necessity.

We do not feel that there is any necessity for locating another cemetery within our borders, and therefore respectfully request that the application made to your board be declined.

Arthur Spragg, H. J. Ashley, J. Garlock, W. M. Hopler, Augustus Ashbey, F. H. Baker, A. M. Stager, John V. Smith, Joseph Owens, Thomas L. Danser, John Jager, William H. Hall, John D. Ferguson, John J. Nass, R. T. Cadmus, R. J. Maxwell, W. Biggart, Wm. B. Corly, Gustav Bruett, John J. Murray, Frank Smith, H. Foster, F. C. Brown, William Henry Linden, Patrick Carroll, S. Grimshaw, C. B. Manley, J. N. Delhagen, J. C. Stevens, Geo. W. Way, W. H. Pierson, Fred'k C. Mace, C. Bennett, S. Westervelt, Herman Schmitt, John Cavanagh, W. M. Vantassel, Sol. Harris, F. F. Harrison, Joseph H. Speer, H. J. Walker, Fred. Walker, Augustus F. Olsen, Elmer B. Griffith, Wm. A. Honay, John A. Lawrence, Henry Hemberston, W. W. Breet, A. H. Dreux, E. F. Adams, L. A. Kimball, Edw. J. Hughes, Richard Jacobus, W. R. Hanna, E. C. Hanna, Ephraim R. Moore, Joseph E. ———, Margaret Dawkins, Sylvanus DeKefair, Thomas McGowan, Joseph Fairbanks, Walter Coggeshall, Lewis B. Harrison, James H. Moore, Frank Foster, Wright C. Stout, T. E. Hayes, G. Whitfield Cook, T. R. Pilch, John F. Maxfield, Joseph B. Maxfield, Joseph R. Maxfield, W. B. Douglass, M. Zahnle, Alex. Stilwell, Jesse C. Green, Thomas H. Derker, Joseph E. Baldwin, Joseph F. O'Rourke, S. A. Andrew, W. Colfax, Dr. J. B. Pitt, L. C. Haskell, W. R. Broughton, Wm. P. Sutphen, John G. Broughton, James P. Jones, Edw. E. Bowns, Frank V. Oakes, E. E. Tillard, F. H. Wurts, Chas. P. Johnson, R. R. Johnson, F. C. Allen, Geo. A. Oakes, G. Lee Stout, Harry E. Richards, Amzi Dodd, J. C. Deach, David Oakes, W. A. Holt, Wm. A. Baldwin, Jas. W. Baldwin, Wm. W. Wyman, J. M. Van Winkle, Allison Dodd, Thos. D. Baxter, Chas. W. Martin, F. J. Ogden, W. H. Van Gieson, M.D., Wm. D. White, M.D., Wm. N. Ward, Chas. J. Murray, E. C. Dodd, Sam'l G. Hayter, Harry L. Osborne, M. W. Boyle, L. O. Vreeland, Chas. W. Smith, E. C. Cokefair, Eli Harris, R. K. Schuyler, E. Maclaury, Fred N. Moffat, J. Milton Unangst, Edward G. Ward, A. T. Cockefair, Peter A. Wade, Thos. Beady, Fred Floeus, Jr., William Fredericks, Geo. B. Marvin, Diamond Mills Paper Co., R. H. Thompson, Rob't. Dodd, Sam'l Garner, John Lempier, Halhican Bros., Thos. Halhican, Mrs. J. P. Boyne, J. R. Conlan, F. N. Unangst, Louis Vogelius, W. R. Hall, Leopold T. Bloch, Noah Hamson, John Newton, W. S. Lockwood, Philip Batzle, J. R. Vreeland, Howard W. Freeman, Wm. D. Carter, Theo. G. Ward, Stanley Greacen,

John Rathus, E. W. Baldwin, George Geib, John Ward, Andrew Brady, James M. Walker, J. H. Fronapfel, Daniel Delberry, Herrman Blaschke, Mrs. B. Hallman, Jacob W. Troutfetter, Mrs. J. Callaghan, Geo. Florus, C. G. Clark, John H. Cocke-fair, Wm. Florus, W. C. Morris, Geo. Van Winkle, Jacob Grover, William Vollmer, Peter Williamson, Henry A. Meinhart, Fred Jacobus, George Koeber, James Bailey, Wm. B. Wyman, B. F. Higgins, Chas. G. Bierwiler, John Bailey, George Jacobus, T. W. Ackerman, J. A. Murphy, Thos. Rawson, Jr., E. E. Newman, G. H. Thomas, I. P. Williams, Thos. D. Anderson, W. S. S. Rowland, Rafael Pedrajas, Chas. Pierrez, John H. Sheldon, Luther Lafin, Wm. Justus Boies, Henry H. Boiet, Henry White, Hiram Peck, J. Irving Taylor, W. A. Francis, John Collins, Dr. J. C. Saile, F. T. Camp, Geo. H. Camp, Joseph M. Mann, F. M. Davis, Thomas M. Smith, J. D. Cooper, John Soller, Chas. A. Davis, E. P. Johnson, J. F. Voyt Rob't B. Young, Samuel Moore, Theodore T. Maxfield, Arthur Russell, Chas. H. Ashley, J. K. Oakes, Samuel H. Baxter, Wm. H. H. Bull, M.D., Thomas H. Albinson, J. S. Wolfe, M.D., Frank B. Stine, J. F. Vogelius, Chas. S. Miller, M. B. Freeman, Geo. E. Holmes, Fred W. Moffett, W. L. Gilbert, Mr. Edmund Bohr, F. Senior.

17. COPY OF PETITION OF PERSONS FAVORING THE GRANTING OF CONSENT TO THE LOCATION OF A NEW CEMETERY IN THE TOWN OF BLOOMFIELD.

To the Honorable State Board of Health of the State of New Jersey:

GENTLEMEN—Your petitioners beg to represent to you that they are members of the order or fraternity known as the "Elks," and that said fraternity desires to secure a burial plot for the use of their brethren of the order in the Lutheran cemetery, which John H. Francisco and others desire to locate and maintain in the northeasterly portion of the town of Bloomfield. That they are advised that the matter of granting the approval of the State Board of Health and their consent to the establishment of said cemetery, is now before your Honorable Body; and they respectfully and earnestly petition your Honorable Body that you will favorably consider said petition and will grant your consent to the location of said cemetery proposed.

And your petitioners will ever pray, &c.

Richard A. McCabe, Michael J. McKiernan, Walter Godfrey, B. G. Harlan, Edward N. Ruyden, I. Shoenthal, John P. Dexheimer, E. H. Sprague, Jacob Weber, Geo. J. Werner, Geo. H. Stewart, Chas. A. Laureigh, F. W. Gibbs, Herbert S. Read, Theo. Niederhauser, W. R. McKay, John J. Bany, Robert Wright, Geo. H. Graham, C. H. Philbrick, John V. E. Stout, G. B. Waterman, Horace J. Arus, Richard L. Tobin, Stuart C. Smith, Ira C. Williams, Michael Walters, Moses L. Gans, R. I. Williams, Geo. B. Snukrod, James Morrison, Alex. Smith, Chas. F. Lighthipe, Thos. A. Hodgkinson, V. F. Lecoq, J. Kratt, Jake A. Werner, Friedrich Reinhardt, Wm. Geisler, A. Schluer, Wm. M. Rhodes, John Jay Maloney, John Cahill, Henry Mills, I. M. Beldon, Edward Swartze, Theo. Chas. Sternnortt, C. W. English, William O. Martin, Fred. Enyelberger, M. Mullen, T. F. Brunnick.

18. COPY OF PETITION OF PERSONS FAVORING THE GRANTING OF CONSENT TO THE LOCATION OF A NEW CEMETERY IN THE TOWN OF BLOOMFIELD.

To the Honorable the State Board of Health of the State of New Jersey :

GENTLEMEN—Your petitioners, citizens, residents or property owners of the town of Bloomfield, in the county of Essex, respectfully show that there are but two incorporated cemeteries in said town, one being known as the Bloomfield Cemetery Company, and the other being known as Mount Olivet Roman Catholic Cemetery; that the property of the Bloomfield Cemetery Company is located partly in the town of Bloomfield and partly in the borough of Glen Ridge, and that less than one-third of the area of said cemetery is within the limits of the town of Bloomfield; that said cemetery is very old, having been in use nearly one hundred years, and is within the thickly-settled portion of said town; that there are comparatively few lots in said cemetery within the town of Bloomfield still unsold, and that the price charged for the same is so high as to make it impracticable for persons of moderate means to procure places of interment therein; that your petitioners believe that the public interests require that an additional cemetery shall be located in said town of Bloomfield, and therefore they respectfully petition your Honorable Body to grant your consent and approval to the proposed location of a new cemetery upon a portion of the Gillespie farm, in the northeasterly portion of said town of Bloomfield, as petitioned for by John H. Franciso and others, whose petition and appeal is now before your Honorable Body for final action.

And your petitioners will ever pray, &c.

BLOOMFIELD, N. J., May 17th, 1901.

Wm H. Groshong, Nicholas + McGee, Robt. McCormick, Frank McCormick, Sr., Jacob Troutfetter, C. J. Hallehan, James Ferguson, August Fredreick, Harry Pier, Hugo C Pemsdorf, John L. Porjuschid, Augustus Emzermah, Sebastian Wilhelm, Christian Bilger, Thomas Brady, Ernst Kirchner, Peter A. Arcede, Thomas Mullaney, James Brady, Joe Miller, Frank Peters Geo. E. Melchor, Tunis Garrabrant, Wm. M. Ackerman, J. A. Oakes, Philip Glaab, Jacob F. Florus, Thomas Bender, E. Brady, Otto C. Beyer, Otto Garnier, Chas. Schneider, J. Matthews, Jr., J. Matthews, M. A. Dillon, Gustave A. Rist G. H. Haines, Christopher Glynn, J. A. Smith, William Fredericks, Abraham S. Hall, James A. Campbell, Elmer Bowman, Geo. Heginger, Geo. G O'Brien, N. J. O'Brien, T. W. Smith, Anthony Peters, Emil E. Raemseh, John H. Hintz, Leo A. Horran, Ella Sleyler, George Rist, Michael Gostegan, Weston Elm-bry, Emma Donald, E. Gruber, Alexander Johnson, William Brooks, George N. Smith, Oscar P. Hopping, Frank L. Cook, Theophilus Richards, Thos. Henge, J. A. Simonson, John H. Moor, Frank Wissner, William D. Hart, John G. Keyler, George H. Ingold, Emil Buehler, Martin Kolff, Charles Stevens, George Zeppelin, James B. Drew, Bert Drew, Henry Brunt, Fred Keyler, Chas. T. Hall, S. Stern, D. S. Conklin, Martin Streib, John Martin, Fred Diefinbacher, John Litz, Chas. W. Gerhard, H. Whitz, Wm. R. Courter, James H. Galloway, F. C. Mahn, Charles Mahn, Edward Cogan, Charles Loud, James H. Courter, Fred Harrison, Thomas Glennon, Geo. Gebhardt, Joseph Cavanaugh, Charles Jaeger, Larry Hesterfer, John Hesterfer, John Mety, John Gerbhart, Frank Hockstool, R. E. Hibbert, James Ward, A. A. DeLany, Isaac Lyon, Charles Weimar, William H. Courter, Jacob G.

Post, Geo. B. Tucker, Harry Jones, I. M. Ortmann, A. J. Cross, H. Wild, Theodore Faller, Wm. U. Oakes, C. T. Coggeshall, James B. Smith, Chas. Stogg, Alex. Paron, Wm. R. Chippes, Adolph Weimar, Henry Samuel, Theodore Harvey, Dominick Cavanagh, Geo. Peterson, Leopold Block, Edward J. Moran, Thomas Manning, John S. Jarvie, Wm. A. Honay, Otto Treiber, Albert Eveland, Nicholas Schneider, Abraham Bodenheimer, Madison Condit, Michael Drudig, Lewis Schapple, John Conway, Frank Zergiebel, James H. Galloway, Harry Y. Weeks, Thos. B. Matthews, W. S. Carver, A. W. Bollenbach, Edw. Molholand, James Morrison, Johana P. Wayman, Jas. Gilus, Thomas Coustee, Daniel Nesbit, Percy Johnson, W. J. Hitchcock, Mortimer S. Ward, Bryon E. Ward, William Johnson, G. A. Van Wagoner, J. F. Woods, August Prichter, Jacob Wagner, A. E. McDougall, Charles L. Meigs, Wm. A. Idle, Jno. R. Broten, Charles E. Davidson, Myron Van Reper, John Peters, Abel P. Campbell, John D. Willis, J. Delamar B. Smith, People's Land Co., Jacob Betsch, Howard S. Bowlby, Chas. A. Davis, T. O. Steenworth, C. H. Philbrick, Wm. Muller, Jr., William Muller, Wright C. Davis, M. A. Derrigan, Charles F. Hummel, Charles H. Ashley, Florence Hallslehen, Rudolph Hallslehen, Chas. Hess, T. W. Brokaw, C. H. Johnson, Frederic R. Schwerdt, Reunte Wissner, A. M. Heath, Michael Walters, George William Bowers, C. A. Price, Charles L. Meigs, Peter Wade, Robert Boyers, F. E. Hitchcock, L. L. Murray, Thomas H. Sutton, E. Russell, E. Silcock, Geo. H. Griffin, Robert Nairn, A. Swan, Wm. Herbst, James Foster, Charles Bowles, Charles Haugberg, F. Samuelson, E. Nystram, Chas. Stirdig, Chas. Wick, Aaron Wick, C. Fleischmann, H. Shiebig, S. Shawcross, Albert Murphy, D. F. Conroy, William Bruce, Carl Demmert, H. B. Hadley, R. Fenwick, W. C. Goodwin, F. E. Adams, J. Allan, Mr. P. McKeon, A. Finnly, Rob't Betts, Edward John. F. Enporning, E. Goodman, J. Lowe, P. H. Shanahan, Aul Joohnson, Chs. P. Joohnson, H. Fenimore, F. Law, R. W. Jaffray, J. Doyle, W. N. Sloan, E. Monahan, A. W. Hoffman, A. Yung, Joseph Vincent, James Wylie, W. Mathers, Fred. Wesbit, A. Geltz, E. Trebour, Jas. Alexander, John Logan, Chas. Bischoff, James Crawley, F. J. Bischoff, Thos. E. Jones, Chr. V. Eigen, A. Ohlson, Charley Winstrop, August Bausemein, Wm. Kramer, Wm. Sigelen, Albert Schmid, Topf Wolf, Martin Christoph, Charles Heine, John G. Weden, Jas. McCarthy, Chas. F. Piaget, F. Olsten, L. E. Russell, E. M. Nicolai, Chas. Nicolai, W. Russell, C. Pinder, Geo. Macauley, Robert Knighton, J. Spaulding, John D. Willis, George A. Cleare, C. A. Winter, James Flynn, William C. Campbell, Sylvanus Wingrundt, P. Bailey, Grace Bailey, Jennie Bickler, Aug. Kessler, Mina Bickler, Annie Melcher, Gussie Cohen, Albert Cohen, Albert Murphy, John Mellfard, Antoni Goiewicz, Piete Ziwenksy, Julius Sturm, Joseph Wolfs, William Gehring, Edward Ornsmy, Tom Stellwest, Bernhard Mertz, Thomas Brady, Antoine Sociervitz, Richard Labaugh, William Miller, Belfe Hopistem, John White, Thos. Fortunor, John Brady, J. Flannery, F. Eckert, F. H. Rudolph, Thomas Connors, James Powers, Edward Rezhor, James Bainson, Jacob Hilowitz, Frank Krasko, Tellman Bill, Peter Kender, Frank Kominsky, Charles Cashuta, Mike Mint, John Hayes, Richaad Hayes, Charles Hanley, Stanislaus Poluki, Joe Talamini, Belfi Antonio, Domenico Talamini, Ralph Idle, S. Waysied, S. Gloworynski, H. Zbikoski, Michael Gilsenan, John McCannah, James A. Boyne, John Grimm, Wm. Corley, Robt. Orr, H. C. Jackson, John Ward, Al. Woods, John Hummel, Allie Cockefair, Thomas Aimbely, John Caffrey, Walter Smith, Mike Watoors, Nicholas McCree, William Lecock, John O'Finnerty, Andrew Wint, John Wint, Andrew Wint, John Chandler, Edward Keogon, Michael Keogon, James Brady, Andrew Brady, August Finks, Daniel O'Connors, Charles Spatz, R. McCormick, T. J. McCormick, Sr., T.

J. McCormick, Jr., Jno. Hodgson, Albert Towers, William Schaffer, Jean Cockefair, Frank Boek, Ralph Idle, Albert Dillen, Jacob Grover, Charles Schaffer, J. H. Cockefair, John Idle, Max Fisher, Wm. Vollmer, Wm. Idle, Albert Carin, Wm. Carin, Frank Wertz, Herman Wertz, Lawrence Durr, George Van Winkle, Joseph Callaghan, Edw. Davis, Edward Flannagan, James Mullaney, Conrad Buck, Jno. Rees, James Murphy, Lewis Gehring, Benj. Mortimer, Sam'l Mullane, Jeremiah Mullane, Dennis Sullivan, Roger Cooks, Mathew Yung, Dennis Conroy, Charles Donahue, J. Colonoskie, John Bremish, Joseph Abt, George Keober, John Pierson, Wm. Ackerman, Jessie Vreeland, James Payne, Jacob Zimmer, James Perret, Joseph Grogan, Thos. Hodgkis, Thomas Hennessy, Wm. Hill, Thomas Moran, Antone Arnt, B. Mansy, Joseph Payne, Jno. Kehoe, Charles Barth, Adam Beck, Jacob Gillman, George Roach, John Bloodgood, Mick Watz, Henry Zioboski, Joseph Miller, Herman Hunonkhoff, William Keily, Wm. Brokaw, Jr., Albert Davidson, J. H. Lyons, Peter Ranranoski, Richard Shears, Carl J. Weeks, Art. Wetmore, Dominick Dunbar, Francisco Petit, Chas. Hornner, William Newman, Stephen Baldwin, John Hedley, William Lownley, Fred. Hoffman, Amzi Trober, Daniel Carroll, Thomas Mulhearn, Joseph Barth, William J. Raab, Jacob Maier, Chas. E. Richter, Morris Kahn, F. G. Grundier, O. Netzel, Bernhard Mertz, John L. Pospischil, Fred. Pospischil, Israel Berman, John S. Koeler, William Wiviz, John Meyer, Simon Greenberg, Arthur Louthausser, Max Greenberg, Fred. G. Fleischer, John Dobbek, Geo. Jacobus, J. H. Crane, Jacob Troutfetter, Frank Strukospi, John Studemann, Paul Herold, Samuel Herold, Theron Akerman, William Founff, Edward Omenz, John Cooper, Daniel O'Connor, Charles McGill, Max Herold, John Monk, Jacob Totter, James A. Boyne, Thomas Mason, A. William Riley, Peter Forroff Baldwin, Jacob Horaner, Edmond Jadofers, Joe Greenberg, Conrad Schenihl, John Baron, Christ Bilger, James M. Conroy, Michael Walters, Thos. Mortimer, Johann Schneider, E. Much, Frances Bettel, Edward Williams, Michael Cogan, M. Abramowitch, J. Kessler, Fritz Herold, Fred. Stock, Ludwig Koester, Ewald Hesse, John Boyne, A. Brady, Wm. Trocher, Louis Garnier, Otto Treiber, Friedrich Hohstuhel, Edward Schwerett, Geo. Heginger, Chas. Zeppelin, F. Mix, Edward McMahon, Thos J. Fleissner, William G. Bailey, Gustav Widman, Joseph G. Voelker, Walter Smith, Richard Hayes, Jos. A. Conroy, George W. Hetzel, W. H. Kingsland, Geo. S. Bernhart, Robert Stein, Wm. Barbour, Louis Frank, Yohan Sisko, William A. Davis, Thomas S. Manning, Wm. R. Courter, John Nagel, Thos. Finnerty, John Sheinder, John C. Walker, E. W. Krichner, George S. Fornoff, William Sonak, Edward Schreiner, Wm. F. Walker, John Menser, J. Bailey, Louis Bock, Bernhard Rudolph, Otto Beyer, M. Cohen, Charles Hanley, Adam Beck, John Blumstein, Victor Herold, S. Slawinski, Thomas J. Martin, James Kelly, William Saterett, Gottlob Rall, Jennie M. Widman, William Leibrock, John Herrmann, Charles Barth, H. F. Putnam, John Navortel, Frank Bickel, Laurence Duer, James G. Ireland, Charles Callin, August Ernst, Alonzo Jackson, William Mullaney, Adam A. Gahs, Julius Sturm, John Konofski, James Brady, Jacob Schmitt Baldwin, William Pfeiffer, Joseph Kraski.

Following is a copy of the opinion rendered in the foregoing case:

NEW JERSEY SUPREME COURT,

February Term, 1902.

AMZI DODD ET AL., Prosecutors,

v.

STATE BOARD OF HEALTH.

Under section 6 of the supplement of 1885 to the Cemetery act (P. L. 1885, p.165), if the municipal authorities consent, and the local board of health refuses, to grant permission to the location of a cemetery within the municipality, this is a refusal to grant consent, within the meaning of the act, and application may be made to the State Board of Health to reverse such action of the local authorities.

In hearing an application to locate a cemetery under the above provision, the State Board of Health acts judicially, and persons interested have a right to be heard before that board.

On certiorari.

Argued before Justices Van Syckel, Fort and Garretson.

Robert H. McCarter, for the prosecutors.

Halsey M. Barrett, for the defendants.

The opinion of the court was delivered by

GARRETSON, J. Application in writing was made to the town council and to the board of health of the town of Bloomfield, praying the consent of the municipal authorities and board of health of that town to the location of a new cemetery in said town. The town council passed a resolution granting the consent, to take effect when the board of health should have given a like consent. The board of health refused to grant consent, and as for a refusal to grant consent, an appeal was taken to the State Board of Health. The statutory regulation of the proceedings to locate a new cemetery is contained in "A supplement to an act entitled 'An act to authorize the incorporation of rural cemetery associations and to regulate cemeteries' (Revision), approved April ninth, one thousand eight hundred and seventy-five." (P. L. 1885, p. 165). By the sixth section of which it is enacted: "That it shall not be lawful to locate any new cemetery or burying-ground or to enlarge any cemetery or burying ground in this state, without the consent and approval of the municipal authorities and board of health of the city, township, town or borough in which it is proposed to locate or enlarge said cemetery or burying-ground, upon application in writing for that purpose made; and in case of the

refusal of the municipal authorities and local board of health to grant the same, then the person or persons making application as aforesaid may apply to the State Board of Health, which shall have power to reverse the decision of the local authorities and grant the application; and in case the local authorities grant the permit to locate or enlarge any cemetery or burial-ground, and the same shall be deemed objectionable by the inhabitants of the city, town, township or borough where it is proposed to locate, then ten citizens, freeholders thereof, may apply to the State Board of Health, which shall have power to reverse the decision of the local authorities and prohibit said location or enlargement."

It is contended on the part of the prosecutors that the State Board of Health, under this statute, had no jurisdiction, and could not lawfully act in the matter. That when the municipal authorities (thereby meaning the town council) consented, and the local board of health refused consent to the location of the cemetery, there was not a refusal to grant consent by the "local authorities," meaning both the town council and the local board of health, within the meaning of the law, so that application might be made to the State Board of Health. This must necessarily involve the converse proposition that there was no granting of permission to locate, and so no application could be made by ten freeholders of the municipality to the State Board of Health to reverse action granting permission, and the result is inevitable that, by the opposite action of the town council and the local board of health, the matter is finally disposed of and application to the State Board of Health prevented.

We cannot think that this was the intention of the law. Both branches of the local authorities must act, and the result of that action is either a consent or refusal. If one consents and the other refuses the cemetery cannot be located. There is, in the language of the act, a "refusal of the municipal authorities and local board of health to grant" consent, and it is upon this "decision of the local authorities" that application may be made to the State Board of Health. To make the consent complete, the favorable action of both the council and the local board of health is necessary, and if one refuses the decision of the local authorities is a refusal to grant consent. Both the "municipal authorities"—that is, the council and the local board of health—acted in this case, and the result of the joint action was a refusal of the consent asked. In such case the statute authorizes application to the State Board of Health. It further appears that the consent of the town council was granted, to take effect when the board of health should have given a like consent. This was a refusal to grant consent until that time, and when the board of health refused to give consent, then both boards were refusing consent.

We think that the State Board of Health had jurisdiction to receive and act upon the application as upon a refusal of the local authorities to grant consent.

The action of the State Board of Health was to reverse the action of "the local board of health" and grant the permission asked for. Their action should have been, under the statute, "to reverse the decision" of the local authorities and grant the application, but the granting of the application upon the refusal of the local authorities to consent is a reversal of the decision of the local authorities, and the formal statement that the action of the local board of health is reversed is immaterial, the decision not being by statute required to be in any special form.

But we think that the action of the State Board of Health cannot be sustained, for the reason that no proper hearing was given.

When the application was presented to the State Board of Health it was referred to the standing committee on cemeteries, burial and transportation of the dead for investigation and report. That committee consisted of the president of the board, *ex officio*, and two other members. An investigation of the site of the proposed cemetery was made by the medical inspector of the board and one of the members of the committee, and the result of the examination submitted to the board by the medical inspector and a hearing given by the same committee. At that hearing two members were present. The committee seems to have made a report to the board, but no other hearing was actually held by the board itself.

The board of health was acting judicially upon the application before it, and all who were interested in that application were entitled to be heard by the board in a legally organized meeting of the board. *Hutton v. Camden*, 10 Vr. 124; *Traction Co. v. Camden*, 27 Vr. 431; *Stanley v. Passaic*, 31 Vr. 392.

The delegation to a committee to examine and report upon facts was within the power of the board, but the parties were entitled to be heard by the board upon the significance of those facts and the legal questions which the situation gave rise to.

The prosecutors were freeholders and taxpayers in the township of Bloomfield, and as such were entitled to be heard before the State Board of Health.

The action of the State Board of Health will be set aside.

The following brief, concerning procedures relating to the establishment of cemeteries in New Jersey and the limitation fixed by law governing the action of the State Board of Health in cases in which an appeal is made from the decision of local authorities, was submitted by the Hon. John W. Griggs several years ago, but it has not before been printed, and it is now published because it deals with questions which are frequently discussed in the course of the hearings on cemetery questions:

<p>In the matter of the appeal of Abraham Vermeulen to the State Board of Health from the action of the Board of Health of the Township of Saddle River in refusing to grant permission to locate a cemetery in said township.</p>	}	<p>Brief of John W. Griggs, of Counsel with the Opponents.</p>
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These proceedings are taken under the act of March 25th, 1885, which is a supplement to the act entitled "An act to authorize the incorporation of rural cemetery associations and regulate cemeteries." (Revision, p. 100).

Section 6 of the said supplement provides that it shall not be lawful to locate any new cemetery or burying-ground without the consent and approval of the municipal authorities and board of health of the township in which it is proposed to locate such cemetery upon application in writing for that purpose made; and in case of the refusal of the local board of health to grant the same, then the person or persons making the application as aforesaid may apply to the State Board of Health, which shall have power to reverse the decision of the local authorities and grant the application.

It is contended on behalf of the opponents in this application that the State Board of Health is not vested with any power to grant an application made by an individual to establish a burying-ground.

I base this contention upon the argument derived from the contents of the statutes which regulate cemeteries, and contend that those provisions are only applicable and are only meant to apply to cemetery associations.

First. That the cemetery act and its supplements do not apply to individuals as the proprietors of cemeteries is apparent from the scope of the act and the provisions therein contained.

The original act (Revision p. 100) provides in section 1 that persons may form a corporation for the purpose of procuring and holding lands to be used exclusively for a cemetery, and directs how the organization shall be made.

Sections 2 and 3 provide for the making and filing of a certificate of incorporation.

Section 4 provides that such an association may hold lands not exceeding seventy-five acres, which lands shall be surveyed and subdivided into lots, and a map filed in the county clerk's office; the trustees may not sell lands until such map has been filed.

Section 5 provides for the annual meetings of the company.

Section 6 provides for an annual report and the holding of elections at other than the regular time.

Section 7 provides that the association may hold property bequeathed or given in trust.

Section 8 provides that the lands and property of such association shall be exempt from taxes and assessments, and not liable to be sold

on execution, and that no street shall be laid out through the cemetery lands without the consent of the trustees.

Section 9 provides that all lands lying within the bounds of any cemetery belonging to or used by any religious society of this State shall be reserved for the use of the owners against all causes of action except mortgages, and shall not be liable to be sold upon execution. This section was originally passed in 1848, and was incorporated by the revisers in 1875 into this act.

Section 10 provides that all lots of ground designated on the maps filed as aforesaid shall be indefeasible between the owners.

Section 11 provides that when lots shall be laid off into plots and transferred to individual holders, such lot, after an interment, shall be inalienable.

Section 12 provides a penalty against defacement of tombs, etc., in the cemetery of any association incorporated under this act or otherwise.

The above is a digest of the whole original act as revised in 1875.

It will be observed that there is not one expression in it which relates to any cemetery owned or controlled by any individual person. Its whole object is to provide for the creation of cemetery associations and to regulate cemeteries owned by associations.

The provisions as to inalienability, freedom from sale under executions, immunity from the laying of roads, exemptions from taxation, etc., are all provisions applicable only to association lands, but are all provisions which are not only proper but necessary in a public point of view to the proper establishment and continuance of any cemetery.

No one of these special privileges would pertain to any cemetery controlled by an individual or individuals not incorporated.

Sundry amendments and supplements to this act have been passed, which appear in the supplement to the revision, pp. 73, etc.

None of those supplements or amendments in anywise enlarges the scope of the original act so as to take in individuals.

One of those supplements is the act of March 25th, 1885, under which this application is made.

It is true that the sixth section of this supplement uses the language, "person or persons making the application." At first reading this might seem to indicate that the Legislature intended to allow individuals to exercise the right to maintain a burying-ground under this act, but a further consideration would lead to the opposite conclusion.

A corporation is a person, so that the term person or persons would include cemetery associations.

Again, application might be made by individuals who would be properly denominated persons in behalf of a cemetery association.

But, no matter what the meaning of the phrase person or persons is, the whole scope and plan of the act to which this is a supplement relates to cemeteries owned by corporations, and it ought not to be

presumed that the Legislature, by the mere use of the words person or persons, meant to extend the right to individuals which it had not previously granted to them, except on complying with the forms of incorporation prescribed in the act.

It was the obvious intention of the Legislature, by the passage of the Cemetery act, to provide a secure and final resting place for the dead. Such is the meaning and effect of the various provisions of immunity and exemption above quoted. It is not to be presumed that the Legislature would have carefully guarded all those rights to persons purchasing lots of associations, and at the same time have left the door open to private persons, to make as many contracts without safeguard or immunity as they saw fit.

Second. Public policy, as disclosed by the provisions of the Cemetery act, as well as represented by the general interests of the public, requires that the scope of this act should not be extended by the State Board of Health. The power the State Board is called upon to exercise on this application is found in an act whose only provisions relate to corporations.

I shall not repeat the arguments I made orally before the committee on this point of public policy. They are sufficiently manifest, I assume, to every member of the State Board of Health. If these safeguards above quoted, made by law for the benefit of lot-holders in cemetery associations, are of any importance, then public policy requires that no cemetery should be established where these safeguards do not exist.

And the argument on the ground of public policy should be supplied by the State Board in the interpretation of this act by way of limitation upon the powers of the Board in the direction here argued for.

Incidentally, I may mention another provision of the Cemetery act, which has an important bearing upon the meaning of the Legislature in this series of enactments.

The act of March 23d, 1883 (Supplement to Revision, p. 76), provides that no more than three cemeteries shall be located or placed under or by virtue of the act to which that is a supplement, in any one city, township or town.

Now, at the time that the act was passed it certainly would have been illegal to establish any cemetery under the act to which that is a supplement, except the cemetery were owned by an association; because only cemetery associations could locate a cemetery under the act.

If, however, the contention that the board has power to grant permission to individuals is to prevail, then this restriction to the three is nullified, because the act under which the board is now able to do so was passed in 1885, while the act restricting the number of cemeteries to three, under the act, was passed in 1883. Therefore, although three cemeteries should have been heretofore located by cemetery associations and incorporated under this act, in any township, it would

still be competent if the opposing view is to prevail for the State Board to authorize any number of individuals to locate cemeteries.

I respectfully contend that the applicant has no right under the statutes to the authority which he asks for, and that if such authority were given by the board it would be a nullity. The matter is one within the discretion of the State Board of Health, and that discretion should be exercised in the interest of the public and not of the individual applicant. The provisions of the Cemetery act indicate the nature and character of the public interests, which ought to be recognized and preserved in the establishment of a cemetery. No one of these interests would be preserved in a cemetery controlled by Mr. Vermeulen. The very highest public considerations, therefore unite to impel the State Board to exercise their discretion adversely to this individual claimant.

JOHN W. GRIGGS,
Of Counsel with Opponents.

Contagious Diseases of Animals.—During the fall of 1900 an unusual number of cases of glanders occurred in Essex county, but the cause was traced to the collection of many cheap animals for use upon public works then in progress; and the prompt destruction of the infected animals speedily terminated the outbreak. The veterinarians employed in the detection and destruction of diseased animals have rendered highly satisfactory service, and this department of the work of the State Board of Health was never more efficiently organized than at present. A detailed statement of the cases which occurred during the year appears further on in this report.

Maritime Quarantine.—The continued occurrence of cases of plague in several ports on the Atlantic coast of South America, and the recent appearance of this disease in Liverpool, has led the State Board of Health to extend the period during which the examination of vessels from foreign ports shall be made, and hereafter, until further action is taken, the inspection of all such vessels which may arrive at the port of Perth Amboy will be made throughout the entire year.

Local Sanitary Administration.—In New Jersey there are 434 sanitary districts, and the authorities of each district are at liberty to take active measures for the protection of the public health, or they may, if they are so disposed, altogether ignore the considerations affecting health which neighboring communities regard as highly important, each township and municipality being authorized by their laws to deal with sanitary questions in accordance with the wishes of the residents of the locality. In but a small number of these districts is an

inspector employed who has received instruction in the practice of the art of hygiene. Carpenters, masons, bakers, blacksmiths, plumbers, painters, all find it necessary to undergo a period of training before they are accepted as competent to ply their various trades in a workmanlike manner and before they can become proficient in the department in which they desire to labor, yet a novice in sanitation, usually one who has not the slightest previous acquaintance with the recognized measures for the protection of the public health, is entrusted with the discharge of duties which, if well done, may save human lives, but if unskillfully performed, invite and often insure the spread of diphtheria, scarlet fever and small-pox, and lead to needless suffering and untimely deaths. How long will the citizens of New Jersey permit this sort of administration of the health laws to continue? For the improvement of the local sanitary inspection service the following bill was prepared and introduced during the legislative session of 1901. The bill failed of passage, but many friends of the measure have expressed a desire for the protection which its provisions would supply, and possibly its re-introduction may result from the public interest which is being taken in the effort to secure for sanitary officers a more intelligent comprehension of the limitations as well as of the life-saving value of the reasonable enforcement of the health laws.

A FURTHER SUPPLEMENT to the act entitled "An act to establish in this state boards of health and a bureau of vital statistics, and to define their respective powers and duties," approved March thirty-first, eighteen hundred and eighty-seven.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

1. To the end that local boards of health may be enabled to secure the services of trained sanitary inspectors, the board of health of the state of New Jersey shall recommend to the governor five citizens of this state, whom the governor shall appoint as a board of examiners of sanitary inspectors; the members of such boards shall be appointed for the term of five years and until their successors are duly appointed, except that the members thereof first to be appointed shall be commissioned, one for one year, one for two years, and one for three years, one for four years, and one for five years; their successors shall be recommended and appointed in like manner for the term of five years each; any vacancy occurring in said board may be filled in like manner for the unexpired term only; the necessary expenses of the said board of examiners, for transportation and subsistence, after having been certified to by the state board of health, shall be paid by the state board of health, provided appropriation therefor is made by the legislature.

2. The board of examiners of sanitary inspectors shall meet at least semi-annually, at such time and places as by their by-laws or rules they may designate, for the purpose of examining applicants for license as sanitary inspectors; every such examina-

tion shall be in such subjects and conducted in such manner as may be satisfactory to the board, and every applicant whose examination shall be approved by said board shall receive from said board a license to act as sanitary inspector for any local board of health in this state.

3. No local board of health shall, on or after the first day of January, nineteen hundred and three, appoint any person as sanitary inspector who is not the holder of a sanitary inspector's license, granted as in this act above prescribed; *provided*, that nothing in this act shall be understood to prevent the continuance in office of any person now serving as an appointee of any local board of health; the title "sanitary inspector," as used in this act, shall be understood to apply to such appointees of local boards of health as may be assigned, by the said local boards, to duties relating to the inspection of premises, and the performance of such other service as now is or hereafter may be authorized by the laws or ordinances, so far as they relate to the protection of the public health, other than the duties of clerical assistants in the office of the board.

4. In addition to the subordinate officers and agents which every local board of health is now authorized to appoint, it may, whenever it deems it expedient so to do, by ordinance create the office of medical officer of health for the locality within which such local board of health has jurisdiction, and may appoint to such office any physician in good standing authorized to practice medicine in this state; such medical officer of health shall hold office for the term of five years from the date of his appointment, unless sooner removed for cause, and shall receive such salary for his services as may be fixed by ordinance; he shall be the executive officer of the local board appointing him, and, subject only to the authority of the local board, shall have command of the board's subordinate officers and agents in carrying into effect the orders of the board.

5. This act shall take effect immediately.

For the better enforcement of the act approved March 31st, 1885, local boards of health are advised to obtain from each ice dealer, on or before April 1st, of each year, a written statement showing the sources from which the natural ice to be sold by the dealer has been harvested. If any such ice dealer should refuse or neglect to furnish such a statement, an inquiry should be at once instituted by the health board, to learn the sources from which the ice supply of the dealer in question is obtained. And no permit for the sale of ice should be issued to any such dealer until the board is satisfied that the waters from which the ice is cut are free from pollution.

Authority for preventing the sale of ice from impure waters is contained in the following act:

mainly to the conservation of the public interest, as distinguished from those which affect the patient only, and if it can be shown that a knowledge of the name and address of each case coming under professional supervision will serve to prevent the spread of tuberculosis, the facts desired should be required from physicians. But to what extent can physicians supply the data in question? Phthisis is a disease which affects large numbers of persons before they are themselves aware of any serious departure from health, and the infectious discharges are often expectorated for months before medical advice is sought. If, however, notification should be by law required, and the comparatively few cases thus observed should be brought to the attention of the health board, what action will be taken which will justify such a requirement? After making an official record of the case, and after delivering to the patient, his family, his landlord and his employer, printed information and instructions setting forth the communicable nature of the disease and the measures to be employed in dealing with consumptives and their sputa, the health officer must then, under present conditions, await results. Note the contrast between these methods and those employed in outbreaks of other communicable affections which are, by universal consent, placed on the notifiable list. In small-pox, for example, the health officer has only to follow the beaten track in dealing with a case of the disease after it has been reported, and with perfect confidence he applies the unfailing preventives—isolation, vaccination, disinfection. Is it within the power of the health officer to employ any procedure of comparative value in averting the spread of tuberculosis? Unlike small-pox and scarlet fever, the danger period in phthisis is not limited to a few weeks, but the disease usually continues with unabated virulence for months or years, and domiciliary surveillance is, for such periods, altogether impracticable. Doubtless, the destruction of all infected sputa would prove effectual as a preventive, but coercion of the vast army of infected persons to the extent of securing the needful change in their habits, which would attend the collection and safe disposal of sputa, is at present quite beyond the reach of the most resourceful sanitary authorities. Meantime, the individual who has been black-listed loses his occupation and becomes a charge upon his family or upon the public. A very common proposal on the part of advocates of imperative notification is that the registration record shall be private, but no one can guarantee that a public record will be kept.

private, and in practice such a cause would be found impossible. The recent action of the United States Treasury Department in prohibiting the admission of immigrants who are affected with pulmonary tuberculosis will serve to exclude advanced cases of the disease, but the difficulties of diagnosis will render the new requirement imperative at ports of arrival in a large proportion of cases. Indeed, the limit of official action for preventing the distribution of tubercle bacilli is thus far so narrow that we must admit its entire inefficiency when the great number of infected persons is considered. When we remember that a majority of those who are affected with this disease recover, and that in a large number of cases where death occurs from other causes the lesions found in the lungs after death afford the first indication showing that the individual was at any period of his life a source of infection to others, it will be seen that the information obtainable during the life of the subject must always remain insufficient, and cannot be extended to include all persons who are capable of spreading the disease.

Notification of pulmonary tuberculosis by physicians is therefore wholly inadequate for supplying the data necessary for complete registration of cases, and it may be considered practically worthless as a means of preventing the spread of the disease, for thus far health authorities have not done more in response to notification than proffer good offices, including distribution of circulars and disinfection of apartments vacated by the patient.

To supplement the facts presented in previous reports concerning the methods in operation in the various municipalities of the State for the removal of waste substances, the following circular letter was sent to local health officers in districts for which information on file was incomplete :

THE BOARD OF HEALTH OF THE
STATE OF NEW JERSEY.
TRENTON, November 13th, 1901. }

DEAR SIR—For the purpose of correcting the records of this office we desire to obtain information in regard to the collection and disposal of refuse materials in your city. Will you kindly reply to the following questions:

1. Garbage, rubbish, ashes and dead animals: Are these substances collected and transported under the supervision of the city? Is this work done by contract or by persons employed directly by the city?

2. What is the final disposal of garbage and rubbish? Are these materials dumped upon the surface of the ground? Are they used for filling sunken lots?

3. Ashes, how are they disposed of?

4. Dead animals, how are they disposed of?

Very truly yours,

HENRY MITCHELL,
Secretary.

The replies received to the foregoing request have been tabulated as follows:

TABLE 23.—SHOWING METHODS EMPLOYED FOR THE COLLECTION, TRANSPORTATION AND DISPOSAL OF GARBAGE, RUBBISH, ASHES AND DEAD ANIMALS IN FORTY OF THE MUNICIPALITIES IN NEW JERSEY.

NAME OF PLACE.	Garbage, rubbish, ashes and dead animals: are they collected and transported under the supervision of the city authorities?	Is the work done by contract?	What is the final disposal of garbage and rubbish?	Final disposal of ashes.	Final disposal of dead animals.
Beverly.....	No.	No.	Garbage sold to farmers. Rubbish burned.	Filling lots.	Buried.
Bloomfield.....	Yes.	.....	Buried.	Filling low ground.	Horses taken to fertilizer works. Other animals buried.
Bordentown..	Yes.	No.	Filling lots.	Filling lots.	Buried.
Bound Brook	To some extent.	No.	Hauled outside of borough limits.	Filling lots.	Small animals buried. Horses carted away by firm in Plainfield.
Burlington.....	Yes.	Yes.	Garbage buried. Rubbish deposited on city dump.	Different places.	Buried.
Camden	Yes.	No.	Burned.	Filling low ground.	Burned.
Cape May	No.	No.	Filling lots.	Filling lots.	Buried.
Collingswood.....	No.	No.	Dumped on surface of ground.	Placed on streets.	Horses and cows carted away. Small animals buried.

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TABLE 23.—SHOWING METHODS EMPLOYED FOR THE COLLECTION, TRANSPORTATION AND DISPOSAL OF GARBAGE, RUBBISH, ASHES AND DEAD ANIMALS IN FORTY OF THE MUNICIPALITIES OF NEW JERSEY—Continued.

NAME OF PLACE.	Garbage, rubbish, ashes and dead animals; are they collected and transported under the supervision of the city authorities?	Is the work done by contract?	What is the final disposal of garbage and rubbish?	Final disposal of ashes.	Final disposal of dead animals.
Dover.....	Yes.	No.	Filling lots.	Filling lots.	Buried or carted away.
East Orange.....	Yes.	Yes.	Hauled outside of city limits.	Filling lots.	Removed from city.
Egg Harbor City..	No.	No.	Garbage used for fertilizing purposes. Rubbish dumped on ground.	Used for fertilizing purposes.	Removed from city.
Elizabeth.....	Yes.	Yes.	Filling lots.	Filling lots.	Made into fertilizer.
Englewood.....	No.	No.	Filling lots.	Filling lots.	Removed from city.
Fairview.....	No.	No.	Garbage usually burned. Rubbish dumped on ground.	Dumped in different places.	Buried.
Fanwood.....	No.	No.	Dumped on ground.	Dumped in different places.	Buried.
Freehold.....	No.	No.	Burned outside of town limits.	Filling lots.	Small animals buried. Large ones removed from town.
Glen Ridge.....	Yes.	Yes.	Dumped on ground.	Dumped on ground.	Removed from borough.
Gloucester City...	Yes.	Yes.	Dumped on ground.	Dumped on ground.	Buried.
Hackensack.....	No.	No.	Dumped on ground.	Dumped on ground.	Made into fertilizer.
Haddonfield.....	No.	Only ashes.	Removed from borough.	Placed on streets.	Made into fertilizer or buried.
Harrison.....	Yes.	Yes.	Filling in meadows.	Filling lots.	Removed to rendering establishment.
Hoboken.....	Yes.	Yes.	Filling lots.	Filling lots.	Removed from city.
Jersey City.....	Yes.	Yes.	Filling lots.	Filling lots.	Taken to factory.
Island Heights...	Yes.	Yes.	Dumped on ground.	Dumped on ground.	Carted away and buried.
Keyport.....	Yes.	No.	Dumped on ground.	Dumped on ground.	Horses taken to fertilizer works. Other animals buried.

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TABLE 23.—SHOWING METHODS EMPLOYED FOR THE COLLECTION, TRANSPORTATION AND DISPOSAL OF GARBAGE, RUBBISH, ASHES AND DEAD ANIMALS IN FORTY OF THE MUNICIPALITIES IN NEW JERSEY—*Continued.*

NAME OF PLACE.	Garbage, rubbish, ashes and dead animals are they collected and transported under the supervision of the city authorities?	Is the work done by contract?	What is the final disposal of garbage and rubbish?	Final disposal of ashes.	Final disposal of dead animals.
Lambertville	Yes.	Part of the time.	Dumped on ground outside of city limits.	Dumped on ground outside of city limits.	Removed from city.
Lodi	No.	No.	Burned or used for fertilizer.	Filling lots.	Removed to fertilizer factory.
Long Branch	No.	No.	Buried.	Filling lots.	Made into fertilizer.
Madison	Yes.	No.	Buried.	Filling lots.	Buried.
Merchantville	No.	No.	Filling low places.	Filling streets.	Removed from borough.
Millville	No.	No.	Dumped on ground.	Filling low places.	Buried.
Montclair	Yes.	Contract with householders.	Buried.	Filling.	Buried, or removed to rendering establishment.
Morristown	Yes.	No.	Removed from city.	Filling.	Buried or sold for fertilizer.
Newark	Yes.	Yes.	Filling meadows.	Filling.	Removed to rendering establishment.
New Brunswick ..	Yes.	No.	Filling lots.	Filling.	Made into fertilizer.
North Plainfield ..	Yes.	No.	Garbage fed to pigs. Rubbish dumped on sunken lots.	Dumped on ground.	Horses removed. Other animals buried.
Orange	Yes.	Yes.	Some fed to hogs, or made into fertilizer. Remainder dumped with ashes.	Filling lots.	Removed to fertilizer factory, or buried.
Passaic	Yes.	Yes.	Filling lots.	Filling lots.	Removed to fertilizer factory, or buried.
Paterson	Yes.	Yes.	Burned.	Filling lots.	Rendered.
Perth Amboy	Yes.	Yes.	Filling lots.	Filling lots.	Removed from city.
Phillipsburg	Yes.	Yes.	Dumped in Delaware river.	Dumped in Delaware river.	Buried.
Plainfield	Yes.	No.	Filling lots.	Filling lots.	Buried.

TABLE 23.—SHOWING METHODS EMPLOYED FOR THE COLLECTION, TRANSPORTATION AND DISPOSAL OF GARBAGE, RUBBISH, ASHES AND DEAD ANIMALS IN FORTY OF THE MUNICIPALITIES IN NEW JERSEY—*Continued.*

NAME OF PLACE.	Garbage, rubbish, ashes and dead animals; are they collected and transported under the supervision of the city authorities?	Is the work done by contract?	What is the final disposal of garbage and rubbish?	Final disposal of ashes.	Final disposal of dead animals.
Princeton	Yes.	Yes.	Removed from borough.	Filling lots.	Removed from borough.
Rahway.....	Yes.	No.	Dumped in river; also used for filling lots.	Filling lots.	Removed to fertilizer factory.
Red Bank	No.	No.	.....	Filling lots.	Made into fertilizer.
Salem City	No.	No.	Dumped on ground.	Filling lots.	Buried.
Somerville.....	Yes.	No.	Removed from borough. Garbage fed to pigs. Rubbish dumped on lots.	Filling lots.	Removed, or buried.
South Amboy.....	Yes.	No.	Filling lots.	Filling lots.	Buried.
Summit.....	Yes.	No.	Garbage fed to hogs. Rubbish burned.	Filling lots.	Removed, or buried.
Vineland.....	No.	No.	Burned or removed from borough.	Filling lots.	Removed from borough.
Woodbury.....	Yes.	No.	Garbage removed from borough. Rubbish dumped on lots.	Filling lots.	Taken to rendering factory or buried.
Woodstown.....	No.	No.	Burned or removed from borough.	Removed from borough.	Removed from borough and buried.

Disinfection.—Many changes in scientific opinion have occurred in recent years concerning the most efficient methods which it is practicable to employ for the purification of infected buildings and their contents, and the rapid succession with which new views have been announced has led to some confusion in the minds of well-informed health officers, but there can be no excuse for the indifferent and easy-going inspector, who liberates a little gas with his formaldehyde lamp and comforts himself with the hope that the infection has been destroyed. Health boards are very rarely composed of men who have knowledge of the art of hygiene, and they are naturally and properly

guided in efforts made to prevent the spread of communicable diseases by the advice of the officer who is employed by them to deal directly with the details of the various measures supposed to be useful, and sham disinfection will doubtless continue until the sanitary inspector shall be trained in the duties which he is expected to perform.

Circular 98 of the State Board of Health contains the following advice and suggestions :

Disinfection of Discharges.—All excreta from the sick person should be received in a porcelain vessel containing half a pint of a solution of corrosive sublimate. The solution should be made as follows : Corrosive sublimate, one-half ounce ; muriatic acid, one ounce ; aniline blue, five grains ; water, four gallons. *This solution is poisonous.* Another half pint of the solution should be added to the discharges before they are emptied into the water-closet.

Disinfection of Utensils.—Dishes, spoons and other utensils, used by the sick person, should be placed in a metallic vessel holding not less than one gallon of water. This vessel should be placed outside of the door of the sick-room, and twice in each twenty-four hours it should be removed to the kitchen range and its contents should be boiled for at least thirty minutes.

Disinfection of Sheets, Undergarments, &c.—Towels, undergarments, sheets and pillow-cases should be immersed in water in a metallic wash-boiler and boiled for not less than one hour. Soft paper and small pieces of cotton cloth should be used instead of handkerchiefs, for receiving discharges from the mouth and nose, and when soiled these should be immediately burned in the sick-room.

Final Disinfection of the Sick-room.—Articles which are of little value should be burned in the sick-room. When practicable, remove all remaining clothing, bedding and other articles which can be transported, and expose them for thirty minutes to a temperature of 240° in a steam sterilizing chamber.

In localities where no such disinfecting chamber is provided, all of the contents of the room should be treated by the free application of a solution of corrosive sublimate (1 to 1,000). This can be done effectually by (a) immersing all clothing, garments, sheets, blankets, &c., in wooden tubs containing the solution, and by thoroughly saturating with the solution all of the articles in the room, including the mattresses, pillows and carpet, and also the side walls, woodwork and floors, by the use of a garden pump and hose with a large rose or spray-producing nozzle. The woodwork and furniture

should afterward be scrubbed with soap and water. Disinfection of garments can also be effected by (b) placing them, one by one, with as little folding as possible, in trunks, or in boxes, and applying to each layer of the goods, by the use of a small sprinkling-pot, a 40 per cent. solution of formaldehyde gas (formalin). The receptacle containing the articles thus treated should be closely covered. After twenty-four hours the wash-goods should be boiled and then washed with soap and water.

Disinfection of Refuse.—All masses of infected filth, in privy pits or in heaps or piles, should be covered liberally with dry chloride of lime.

Following is a copy of the act which governs the destruction of infected goods :

CHAPTER CCXII.

A FURTHER SUPPLEMENT to an act entitled "An act to establish in this state boards of health and a bureau of vital statistics and to define their respective powers and duties," approved March thirty-first, one thousand eight hundred and eighty-seven.

1. BE IT ENACTED by the Senate and General Assembly of the State of New Jersey, That whenever the state board or any local board of health in order to prevent the spread of contagious disease, destroy, or order to be destroyed, personal effects or bedding, it shall be the duty of the said board to make or cause to be made an inventory of the said personal goods, and immediately thereafter to certify the value of said personal goods so destroyed to the state treasurer, in case they have been destroyed by the state board of health, and to the municipal authorities in case of local boards, and it shall be the duty of the state treasurer or municipal authority to pay over to the owner of said goods or his or her legal representatives, the sum so certified.

2. And be it enacted, That all acts and parts of acts inconsistent herewith be and the same are hereby repealed, and that this act shall take effect immediately.

Approved March 17, 1893.

Summer Resorts.—Summer resorts in New Jersey have continued to increase in number and to grow in population. Much is expected of these towns in the way of establishing and maintaining sanitary defences against preventable causes of disease, and there are strong economic considerations to spur them on to become leaders in this department of municipal administration. An examination of the record of inspections of the seaside resorts of Monmouth county, printed on subsequent pages of this report, indicates the varying degrees of progress which these communities have thus far made in providing pure and wholesome water and good drainage for the dwellings in which patrons are received and entertained. Following is a list of towns in New Jersey in which the population is much increased

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during the vacation season by persons seeking rest, recreation, pleasure and health :

TABLE 24.—LIST OF SUMMER RESORTS IN NEW JERSEY, SHOWING PERMANENT POPULATION, NATURE OF WATER-SUPPLY, SEWERAGE, AND DEATHS FROM PREVENTABLE DISEASES, FOR THE YEAR ENDING JUNE 30TH, 1901.

NAME OF PLACE.	Population by United States census of 1900.	Source of water-supply.	Sewerage.	Deaths from the ten chief preventable diseases.	Deaths from typhoid fever.
Anglesea	161	Domestic wells.	No sewers.	0	0
Asbury Park	4,148	Artesian wells.	Sewers.	18	0
Atlantic City	27,839	{ Artesian wells and surface water. }	"	136	3
Atlantic Highlands	1,383	Artesian wells.	"	3	1
Avalon	93	Domestic wells.	No sewers.	0	0
Bay Head	247	Artesian wells.	"	0	0
Beach Haven	239	"	Sewers.	1	0
Bradley Beach	982	"	No sewers.	8	0
Brigantine	99	Domestic wells.	"	0	0
Cape May City	2,257	Wells.	Sewers.	11	2
Cape May Point	153	"	"	0	0
Harvey Cedars	39	"	"	.....	.....
Holly Beach	569	"	"	3	0
Hopatcong .....	.....	"	"	.....	.....
Keyport	3,413	Artesian wells.	"	.....	.....
Lakewood (winter resort) ..	3,094	"	"	19	0
Long Beach City .....	.....	Domestic wells.	No sewers.	0	0
Long Branch	8,872	Brook.	Sewers.	47	5
Manasquan	1,500	Domestic wells.	No sewers.	2	0
Neptune City	1,009	"	Sewers.	1	0
North Spring Lake	361	"	"	0	0
Ocean City	1,307	Artesian wells.	"	6	1
Point Pleasant Beach	746	Driven wells.	No sewers.	5	0
Red Bank	5,428	Artesian wells.	Sewers.	19	2
Sea Isle City	340	"	"	1	0
Somers Point	208	Domestic wells.	No sewers.	1	0
South Atlantic City	69	"	"	0	0
South Cape May	14	"	"	.....	.....
Spring Lake	526	Artesian wells	Sewers.	0	0
West Cape May	696	Domestic wells.	No sewers.	4	0
Wildwood	150	Artesian wells.	Sewers.	0	0

Medical Inspection of Schools.—Reports have been received from the following sanitary districts in relation to the medical inspection of schools :

Asbury Park.—Medical inspection of pupils in the public schools was first regularly instituted in Asbury Park in the fall of 1900, but volunteer service had been performed to some extent during the pre-

vious year. Dr. John Taylor was appointed medical inspector, and for his convenience in conducting the work he was provided with an office in the High School building, and the following articles were purchased: A cabinet for record cards, adjustable gas lamp and mirrors for examining ears, noses and throats, nasal and ear specula, stethoscope, scales, measuring rod, tape measure, test types, test worst-eds, wooden tongue depressors, set of tuning forks, glass dishes and towels. The duties imposed upon the medical inspector by the Board of Education consist of two wholly distinct lines of work; first, the detection of communicable diseases among the pupils, and, second, the examination of pupils for the purpose of recording from year to year the degree of physical development attained in the case of each pupil.

The following blank cards are used by the medical inspector in making his records, each card measuring four inches by six inches, and being permanently filed in the card-cabinet before mentioned:

Asbury Park Public Schools.

DEPARTMENT OF MEDICAL INSPECTION.

The medical inspector will visit the school buildings each day at 10 A. M.	Date.....	This card is to be filled out by the teacher when any pupil appears to be ill. This card should then be sent to the doctor's desk.
	Name of pupil.....	
	Residence	
	Age..... Class.....	
	Any cases of sickness at home?.....	
	
	
	Symptoms noted by teacher:	
	
	
	Teacher.	

A supply of these cards is placed in the hands of each teacher, and pupils are sent to the inspector from time to time as the following table shows. The inspector visits his office in the school building at ten o'clock every morning as nearly as possible, and, by messenger, summons any children for whom cards have been delivered at his desk, and these cases are then disposed of (1) by returning pupils to the class-rooms when the illness is of a trivial nature; (2) by sending the child to his home with a notice drawing attention to the need of medical care, as in urticaria, &c., and (3) by excluding the child when the illness is found to be communicable. It should be noted that before any child is excluded from the schools the facts relating to the case are first reported to the superintendent, and no action is taken until his approval is given. Following is the form of the card used in notifying parents in cases of communicable diseases:

Asbury Park Public Schools—Medical Inspection Department.

.....19...

Mr.....

Dear Sir: Symptoms of illness have appeared in the case of
....., and you are advised to place the child under the care of
your family physician. When the child returns to school a physician's
certificate, showing that recovery has occurred, should be furnished.

Very respectfully,

.....M.D., Medical Inspector.

The annual examinations for learning the growth and development of pupils are conducted in the afternoon from time to time, as the convenience of the medical inspector permits, and it has been found that when an assistant is present to write the record, five children can be examined in one hour. Following is the form of the blank card used for recording these examinations:

Asbury Park Public Schools.

DEPARTMENT OF MEDICAL INSPECTION.

No..... Date..... Class.....

Name..... Age.....

Weight..... Height..... General condition.....

Chest measurement..... Inspiration..... Expiration.....

Dorsal spine.....

Cutaneous diseases.....

Heart..... Lungs.....

Throat.....

Naso-pharynx.....

Nasal Septum..... Teeth.....

Eyes { R..... Color }
 { L..... Sense }

Ears { R.....
 { L.....

Date of last successful vaccination.....

From the first annual report of the medical inspector of schools of Asbury Park the following extracts are taken :

"A complete physical examination of the children in the kindergarten was found impracticable because of their age, but a card has been filled out for each pupil in the kindergarten, giving the name, age, general condition and date of vaccination. The examination of the throat and naso-pharynx of some of the older children who were extremely nervous has been omitted. The following tables have been compiled from the records now on file in the office of the medical inspector :

Number of visits made by medical inspector to school building, for detection of communicable disease (total number of school days, 175).....	172
Number of physical examinations made	641
Number of reports received from teachers	45

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The following table shows age, number of pupil of each age, and the average weight and height:

Age	Number.	Average Weight.	Average Height.
5 years.	2	40.00 pounds.	42.50 inches.
6 "	11	47.88 "	48.40 "
7 "	42	49.54 "	47.88 "
8 "	52	54.13 "	49.64 "
9 "	56	61.67 "	50.54 "
10 "	63	66.28 "	53.18 "
11 "	50	68.52 "	55.75 "
12 "	59	95.51 "	56.50 "
13 "	40	89.12 "	58.95 "
14 "	44	102.90 "	61.06 "
15 "	38	110.73 "	63.05 "
16 "	41	118.53 "	63.93 "
17 "	28	122.88 "	64.90 "
18 "	12	131.00 "	65.92 "
19 "	2	115.50 "	62.00 "

The general condition of pupils was found to be as follows: Anæmic, 149; well nourished, 403; robust, 89. One case of Pott's disease of the spine was discovered.

Cutaneous diseases were found as follows: Ichthyosis, 1; acne, 6; pediculi capitis, 2.

RECORD OF EXAMINATION OF HEART.

Pulse Rate.	Number.	
50 to 55 per minute.	2	Regular.
55 to 60 " "	3	"
60 to 65 " "	5	"
65 to 70 " "	6	"
70 to 75 " "	197	"
75 to 80 " "	61	"
80 to 85 " "	43	"
85 to 90 " "	90	"
90 to 95 " "	52	"
95 to 100 " "	27	"
100 to 105 " "	7	"
105 to 110 " "	11	"
110 to 115 " "	6	"
115 to 120 " "	9	"
60 to 65 " "	1	Irregular.
70 to 75 " "	4	"
85 to 90 " "	13	"
90 to 95 " "	5	"
95 to 100 " "	3	"
105 to 110 " "	1	"
55 to 60 " "	1	Valvular defects.
70 to 75 " "	2	" "
75 to 80 " "	1	" "
85 to 90 " "	1	" "
90 to 95 " "	3	" "

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Examination of lungs showed that in one case there was reason to suspect the existence of phthisis.

EXAMINATION OF THROAT.

Normal	50	Double uvula.....	2
Tonsils enlarged.....	499	Enlarged lymphatic glands of neck..	1
Not examined.....	92	Enlarged thyroid.....	1
Bifurcated uvula.....	3		

EXAMINATION OF NASO-PHARYNX.

Normal.....	302	Not examined.....	280
Adenoids ..	59	Cleft palate.....	1

EXAMINATION OF NASAL SEPTUM.

Straight.....	112	Ecchondrosis, left.....	214
Normal.....	334	Perforated septum.....	1
Curved	5	Ulcer septum	1
Thickened	89	Displaced cartilage, right.....	2
Deflected, right.....	8	Displaced cartilage, left.....	1
Deflected, left.....	10	Atrophic rhinitis.....	9
Ecchondrosis, right.....	158	Enlarged turbinated.....	8

EXAMINATION OF TEETH.

Good condition.....	500	Decayed.....	47
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EXAMINATION OF EYES.

Vision.	Right Eye.	Left Eye.	
20— 20	449	447	
20— 30	25	26	
20— 40	14	14	
20— 50	6	11	
20— 70	5	4	
20—100	5	3	
20—200	2	1	
Not examined.....	92	Letters not known.....	48
Blepharitis marginalis.....	4	Use glasses.....	20
Acute conjunctivitis.....	1		

EXAMINATION OF EARS.

Drums normal.....	306	Perforated drum, right.....	5
Drums retracted.....	208	Perforated drum, left.....	2
Impacted cerumen, right.....	63	Chr sup. ot. med.....	7
Impacted cerumen, left... ..	59	Eczema ext. aud. canal.....	1

EXAMINATION FOR COLOR SENSE.

Perfect.....	403	Confusing red, violet, blue, green and yellow	1
Colors not known.....	9	Confusing blue, green and red.....	1
Confusing blue and green.....	74	Confusing blue, green and yellow....	4
Confusing blue, green and violet.....	6	Confusing blue, green, yellow and orange	2
Confusing blue, green, violet and red..	19	Confusing blue, green, yellow, orange, red and violet.....	1
Confusing blue, green, violet, red and orange	3	Confusing yellow and green.....	1
Confusing red and violet.....	9		
Confusing red, violet and blue.....	3		

The number of vaccinations is subsequent to the year 1895, and all vaccinations before this date are placed under one head :

1901.....	77	1895.....	25
1900	152	Before 1895.....	40
1899.....	59	Never.....	142
1898.....	56	Date not known.....	47
1897	24	Had small-pox	1
1896	17		

Five hundred and twenty-seven pupils were found to be right-handed, 19 were left-handed, and 3 use both hands equally well. In 92 cases the facts relating to this inquiry were not ascertained.

The cases referred by teachers to the medical inspector were recorded as follows :

Ringworm of face.....	4	Urticaria.....	2
Ringworm of scalp.....	1	Indigestion.....	3
Chr. sup. ot. med.....	1	Eczema of face.....	1
Ped. cap.....	2	Acute conjunctivitis.....	3
Alopecia areata	1	Acute laryngitis.....	1
Scarlet fever.....	1	Acute bronchitis.....	2
Gonorrheal ophthalmia.....	1	Tonsilitis.....	1
Pharyngitis.....	1	Stomatosis	1
Hordeolum	3	Cases in which the teacher's suspicions were not confirmed.....	9
Intercostal neuralgia.....	1		
Defective eyesight.....	5		

At a conference with the teachers to consider the cases of backward pupils, there were presented twenty-one names ; seventeen of these, or 80.95 per cent., were below the standard physically."

One instance, showing the value of this new service, has just been reported, as follows: A pupil in the kindergarten department of one of the municipalities of the State was observed to be much deformed by cicatrices of an old ulceration involving one side of the face and including one eye. The question arose as to whether it is justifiable to advise the exclusion from the schools of children who are so deformed

that their presence will excite in the minds of other pupils sentiments of horror and disgust. But it was found that in this case a mucopurulent discharge from the eye was flowing down upon the cheek, and a specimen of this fluid was forwarded to the State Laboratory of Hygiene, in Princeton. The report from the laboratory announced that gonococci were present in the discharge. The Board of Education at once ordered that the infected child should be excluded from the school. It is worthy of notice in relation to this case that the pupil referred to was provided with a certificate from the family physician, stating that the affection of the eye was not communicable.

Camden.—Henry H. Davis, M.D., states that medical inspection of schools in the city of Camden has been regularly established. The population of the city was, by the last census, 75,935, and the enrollment of pupils in the public schools numbers 13,000 (ap.). There are 29 schools and 317 divisions. Dr. Davis has been appointed to the office of medical inspector, and he visits each of the schools at least as often as once in each month. Upon notice from any teacher, Dr. Davis immediately visits the school and takes such action as may be necessary for the prevention of the spread of disease, including the exclusion of infected pupils, cleansing of the infected portions of the school building and subsequent daily inspection of pupils who have been exposed to infection.

Jersey City.—From Henry Snyder, superintendent of public schools, it is learned that by arrangement with the city board of health the city physicians, eight in number, act as medical inspectors in the schools. These officers visit the schools twice a week, inspect each building and its surroundings and examine the children to discover evidence of contagious disease. Should they detect a case of contagious disease they advise the principal at once to exclude the child from school.

Mount Holly.—Dr. R. H. Parsons, president of the board of health, writes that the board of education of Mount Holly has appointed a medical inspector for the public schools, who visits the schools regularly and examines the children who show any signs of illness. He makes such disposition of each case as the circumstances warrant. One address has been given to the teachers on the early symptoms of communicable diseases. Vaccination has been required as a prerequisite to admission to the schools.

Newark.—Dr. A. B. Poland, city superintendent of schools, writes :

The question of medical inspection is now before our board of education and it is likely that medical inspectors will be appointed before the opening of the fall term. The number of medical inspectors and their compensation has not yet been determined.

Orange.—W. M. S. Wingle, superintendent of public schools, says that medical inspection has not yet been adopted, but it has been recommended.

Passaic.—Superintendent F. E. Spaulding writes: I have recently brought this subject to the attention of my board, with the recommendation that medical inspectors be employed. The committee to which the matter was referred will, I think, report favorably.

Paterson.—Four medical inspectors of schools have been appointed, and the following instructions for their guidance have been issued:

“Inspectors are required to visit all the schools to which they have been assigned between the hours of 9 A. M. and 11 A. M. every day that school is in session, and, as far as practicable, at the same hour each day.

“They are to carefully examine each child that has been isolated by the principal or teacher in charge, and cause to be excluded from school each one affected with or showing symptoms of any contagious or infectious disease, more especially the following: Measles, diphtheria, scarlet fever, croup, whooping cough, mumps, contagious eye diseases, parasitic disease of the head or body, or chicken-pox. They shall furnish each pupil that is to be excluded with a printed card, upon which they shall note the date, name and location of the school, name, age and address of the child, and reason for its exclusion. These cards, signed by the medical inspector of the school, are to be taken home by the excluded pupils. Each day, before leaving a school, each inspector is required to fill out a printed daily report blank, giving the date and time of visit, the name, location, district, the number of children examined (male, female and total), the full name, age and address of each one excluded, with the diagnosis of each excluded case. On the last school day of each week, the printed summary blank, on the back of the daily report blank used that day, is to be properly filled out for each school day that week, and a duplicate filed with the secretary of the board of education. Each day, as soon as possible, after leaving the last school to be visited, inspectors are required to mail a separate daily report (properly folded and backed) for each school.

visited, to the office of the board of health, where a daily summary is made of the work performed in all of the schools visited.

"Children excluded on account of whooping cough, mumps, contagious eye disease, parasitic disease, &c., should be told to return when cured, and should be again examined before returning to their class-room; if not entirely well they should be again excluded.

"The inspector shall ascertain from the principals and teachers of the schools the names and addresses of all children having contagious diseases in their families where notification has not been sent to the schools by the board of health, and such lists shall be forwarded with the daily report. Inspectors shall keep a daily record in a blank book, furnished for such purpose, of the number of children examined (male or female and total), the full names, ages, residences and cause for expulsion of those excluded from school.

"If, by reason of illness or other cause, an inspector is unable to report at a school, arrangements must be made, by him, with an inspector of another school to act as a substitute, and the health officer informed of the fact without unnecessary delay.

"If, in the opinion of an inspector, immediate action should be taken by the board of health in any case, he should immediately communicate by telephone with the office of the board of health.

"Inspectors shall report at the office of the board of health once during each month, the time to be designated by the health officer. Exclusion cards for pupils, daily report blanks, addressed envelopes, blank books for recording the work performed, wooden tongue depressors, will be furnished at the office of the board of health.

"The daily duties of the inspectors shall cease when they have mailed their reports, after leaving their schools. They are not under any circumstances to visit children in their homes, to prescribe for them or suggest treatment at the schools. The treatment must be received from the family physician, in the dispensaries, or in the hospitals.

"Said medical inspectors shall, when so required, meet and instruct the teachers of their district in matters relating to the discovery of communicable diseases and their proper isolation."

The following rules concerning contagious diseases were adopted by the board of education November 30th, 1900:

RULE 1. Whenever a principal, or teacher, shall ascertain that there is a case of contagious disease in a family in which there lives any child, or children, who attend school, such child, or children, shall be

immediately excluded from school ; the principal, or teacher, shall also exclude from school any child, or children, upon notice by the board of health that the protection of the public health requires it ; the said child, or children, shall not be permitted to attend school until a certificate of the board of health is presented, stating that there is at that time no contagious disease existing in the family, and that it is safe for said child, or children, to attend school.

RULE 2. It shall be the duty of all teachers, at the time of morning roll-call, to select from their classes any child who appears to be ailing or any child who, from any information received, they have reason to believe has been in contact, in the family or otherwise, with any one ill with contagious or infectious disease. Such children must be separated from the rest of the class, in a room set apart for that purpose by the principal, for examination by the medical inspector at the time of his visit. Principals and teachers shall be required to aid the medical inspector in such action as may be deemed necessary for the protection of the health of the other children of the school.

RULE 3. Whenever a principal, or teacher, shall dismiss a pupil from school on account of sore throat or any eruptive disease, a notification of such dismissal shall be sent immediately to the board of health, by the principal, who shall give the name and address of the pupil and the disease causing such dismissal.

RULE 4. Whenever information relating to the existence of contagious disease shall come to the principal, or teacher, from other sources than the board of health, such information shall be communicated immediately to the board of health.

RULE 5. No new pupils who live in a house where there is a case of contagious disease, or in which one has recently occurred, shall be admitted to school, or excluded therefrom, except in accordance with the above rules.

RULE 6. The principal of the school shall make a weekly report to the board of health on blanks furnished for that purpose, of the names and addresses of all pupils absent from school on account of sickness of whatever nature, with the disease, so far as known, of those absent.

RULE 7. Whenever a pupil is excluded from school on account of any contagious disease, his or her desk and seat shall be washed with an antiseptic solution provided for that purpose.

RULE 8. All floors, doors, door knobs, stairs, and hand banisters

of all school buildings shall be washed with an antiseptic solution provided for that purpose, at least once each week.

RULE 9. All practicing physicians shall be requested to notify the principal of the school which is attended by any person, or member of a family of any person, suffering with any contagious disease.

RULE 10. The board of health is requested to send daily to the several schools, and to the board of education, a list of houses in which any case of contagious disease has been reported during the previous twenty-four hours, with the names, ages and diseases of the persons reported.

RULE 11. A circular of information embodying the foregoing rules, and whatever additional information may be required for the carrying out of the same and for preventing the spread of contagious and infectious diseases, prepared by the board of health, shall be printed, framed, and hung in every school room.

Plainfield.—The annual report for 1898 of Mr. Henry M. Maxson, superintendent of public schools, contains the following record:

"In January the board of education appointed two school physicians, on a regular salary, to visit the schools systematically, and to inspect the buildings and the pupils, and who could be summoned by telephone by any principal that found a pupil in school that showed symptoms of disease. These physicians have examined all the pupils in the city in the matter of eyesight, hearing, vaccination and throat. This examination discovered over one hundred cases of defective eyesight and fifty or more cases of defective hearing, which were duly reported to the parents with recommendations to consult a specialist. In many cases the action has resulted in improvement, not only of the local defect, but of the general physical condition of the child.

"While these are, in brief, the results that can be tabulated, I believe the appointment of school physicians is of very great benefit to our children in ways that cannot be thus shown. By their appointment, each school has the trained eye of a physician constantly on the watch to discover and remove anything that may encourage or spread disease, and the hygienic condition of the schools was never so good as it is to-day. In case of any symptoms of contagion in any section, these physicians visit the school in that section, examine the buildings and yards, note the physical condition of the children, and take such measures as seem wise to prevent any possibility of the disease spreading through association of the children.

"If a child comes to school with flushed face, sore throat or other physical disturbance that would indicate disease, the teacher separates him from the rest, and at once summons the physician to pass judgment upon the case, and the rest of the class is not exposed, so that no parent need feel anxiety as to contagion in school."

In his annual report for 1899 the city superintendent of schools of Plainfield writes as follows:

"The plan inaugurated last year of employing two school physicians has been continued with increasing satisfaction. It ensures the frequent examination of our schools by the trained eye of an expert; it also affords the teacher the means of securing prompt medical advice in suspected cases of disease or physical defect, and thereby avoids unnecessarily alarming parents, and also often prevents parental neglect. When several cases of any contagious disease develop in one school, the school physician makes a special inspection of the children, and provides for disinfection of the building, and whatever precautions are necessary to prevent the spread of the disease among the children.

"In place of the old tin cup, loaded with microbes, the pupils now drink from a running stream of water. Instead of sixty or more pupils in a room, we now try to have forty or less. In the December vacation, all the floors and wainscotings of each building were washed with a disinfectant, and the operation will be repeated as frequently as circumstances require. Finally, each school is under the constant care of a physician, who has already examined all the children as to eyesight, hearing, throat and skin, discovering many cases of defective or diseased condition that were unsuspected by the parents. These physicians carefully examine each child showing symptoms of disease, and whenever there are several cases of contagious disease among children from the same school, a special examination of the whole school is made."

Trenton.—B. C. Gregory, supervising principal of public schools, says:

"We have no medical inspectors in our schools, but I am about introducing the subject; indeed, shall bring it before the board within a month. I have discussed the subject in my annual reports for several years, and I hope we are on the line of action."

Public Water-Supplies.—The inspection of streams from which water for municipal supplies is obtained has proceeded during the past year, and action has been taken in the case of persons found to be responsible for the pollutions which have been discovered. In a suit brought in the Court of Chancery to prevent the discharge of waste fluids from the Diamond paper-mill, Milburn, into the Rahway river, questions are involved, including the constitutionality of the act under which the State Board of Health is operating in its efforts to prevent contamination of water used for potable purposes, which underlie all actions for the enforcement of the act referred to, and therefore new prosecutions under this statute are being withheld until a decision is reached in this case.

The following statement by the attorney for the State Board of Health shows the scope of the questions presented to the court :

IN CHANCERY OF NEW JERSEY.

Between

THE STATE, EX REL. THE BOARD
OF HEALTH OF THE STATE OF
NEW JERSEY,

Complainant,

and

THE DIAMOND MILLS PAPER COM-
PANY,

Defendant.

On Bill for Injunction.

BRIEF ON FINAL HEARING BY W. M. LANNING, FOR
COMPLAINANT.

The essential allegations of the bill are that Rahway city obtains its public water-supply for domestic use from the Rahway river, and that the defendant discharges into that river, above the city's intake, factory refuse which tends to corrupt and impair, and in fact does corrupt and impair, the quality of the water of the river.

The complainant has not alleged, nor has it attempted to prove, that the waters of the river are at any point so polluted by the refuse from the defendant's factory as to be a public nuisance.

Neither has the complainant attempted to prove (though there is an allegation in the bill to that effect) that the waters of the river are

at any point now made injurious to health by the defendant's factory refuse.

Assuming, for the present, that the essential allegations above mentioned are proven, are we entitled to the injunction prayed for?

This proceeding has no precedent in this State. It is a new proceeding. Its supposed authority is found solely in chapter 41 of the Laws of 1899. That act, in its first section, declares that: "No * * * factory refuse * * * which, either by itself or in connection with other matter, will corrupt or impair, or tend to corrupt or impair, the quality of the water of any river * * * from which is taken, or may be taken, any public supply of water for domestic use, in any city, * * * shall be discharged into the waters * * * of any such river * * * above the point from which any city * * * shall or may obtain its supply of water for domestic use." * * * A penalty of \$100 is prescribed for violation of this section.

The second section provides the machinery for recovering the penalty in a summary proceeding.

The third section imposes upon the State Board of Health the obligation of supervising, as to their purity, all public water-supplies for domestic use within the State, and makes it the duty of all local boards of health, municipalities and persons to answer such inquiries concerning the pollution of water-supplies as the State Board may address to them.

Then comes the fourth section, which declares that: "If any * * * corporation * * * shall violate any of the provisions of the first section of this act, it shall be lawful for the said State Board of Health, instead of proceeding in a summary way to recover the penalty prescribed in said section, to file a bill in the Court of Chancery, in the name of the State, on the relation of such Board, for an injunction to prohibit the further violation of the said section." * * *

In determining whether the provisions of the above-mentioned act are sufficient authority for issuing the injunction prayed for in this cause, it is necessary to consider, first, the object of the act, and, second, the means by which that object is sought to be secured.

I. The Object of the Act.

Its object is expressed in its title. It is "to secure the purity of the public supplies of potable waters in this State." Such an object calls for the exercise of the police power of the State, and in the exercise of that power the State has declared that no factory refuse which will corrupt or impair, or tend to corrupt or impair, the quality of the water of any river used by any municipality for do-

mestic purposes, shall be discharged into the river above the intake of such municipality.

That prohibition is the law of this State. The Legislature has declared it, and the will of the Legislature, within constitutional limits, is supreme.

The object is clear. The prohibitions of the act are not merely against doing those things that make public water-supplies injurious to health; they are also against those things that in any way corrupt or impair, or *tend* to corrupt or impair, the quality of the water of any river at any point, though it be miles above the intake of any municipality. It is not for the courts to decide whether such legislation is necessary or unnecessary, wise or unwise. They can only decide whether it is constitutional or unconstitutional. Whether it is a necessary or wise exercise of police power is a question for the Legislature, and for it alone, to decide. The legislative object being clear, and the legislative act being constitutional, the courts, when their aid is sought in accordance with the prescribed legislative plan, are bound to give effect to the legislative object. I refer to some of the authorities on this point:

"In virtue of its right and duty to provide for the public welfare, the legislative branch of the government possesses a vast and indefinable power and a large discretion as to the manner in which it should be exercised. It may determine primarily upon the necessity or expediency of legislation in respect of any particular matter, and as to the legislative means which should be adopted to accomplish any legislative object." Parker & Worthington's Public Health and Safety, p. 5.

In *State v. Wheeler*, 15 Vr. 88, the validity of the act contained in General Statutes p. 1107, § 311, was passed upon by the Supreme Court, the opinion being rendered by Justice Magie. That act provides "that if any person or persons shall throw, cause, or permit to be thrown, into any reservoir, or into the waters of any creek, pond or brook of this State, * * * the waters of which are used to supply any aqueduct or reservoir for distribution for public use, * * * any offal or offensive matter whatsoever calculated to render such waters impure, * * * such person or persons shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine not exceeding one thousand dollars, or by imprisonment not exceeding two years, or both." The defendants were indicted under the above act. The offer was made in the trial court to prove that the waters of the brook in which offensive matters were charged to have been put by the defendants became purified and inoffensive before reaching the reservoir, of which its waters formed part of the supply. Such evidence was rejected and the rejection excepted to. The defendants also requested the Court to charge the jury that "unless their acts were calculated to render the water as supplied to such reservoir impure or offensive, they could not be convicted." The

Court refused so to charge, but, on the contrary, charged "that it was immaterial whether the offensive matter put in the brook actually affected the water in the reservoir or not." It was objected by the defendants' counsel in the Supreme Court, on a writ of error, that the trial court erred in the respects above mentioned, and that, if the construction given to the act was the correct one, the act deprives an owner of property of its use without compensation, and so is unconstitutional. Justice Magie said: "I entertain no doubt that the court below, in the rulings above referred to, correctly construed this act. The question turns on the meaning and relation of this clause: 'calculated to render said waters impure.' What 'waters' are thereby intended—those of the reservoir, where waters are collected for distribution for public use, or those of the creek, pond or brook, the waters of which supply such reservoir? The grammatical connection of the clause is only consistent with the latter meaning. The other portions of the act unmistakably indicate that such was the meaning intended by the Legislature. The section above quoted makes punishable the mere connection of a water-closet with the waters of such creek, &c., whereby its contents may be discharged therein, without reference to whether the waters of the reservoir were thereby polluted. So, it punishes the deposit of offensive matters where they may waste into the waters of such creek, &c. * * *

The title of the act, is inconsistent with any limited construction. The whole act plainly shows a design to protect from pollution the waters of creeks, &c., used as the feeders for reservoirs for public use, without any reference to whether such pollution in fact appreciably affects the waters when arrived at the reservoir." Justice Magie then proceeded to say that such construction of the act does not render it contrary to the provisions of the constitution. He declares it to be a proper regulation of the use of private property for the protection of the common right of the citizens of the State, and that such legislative acts are plainly within the police power of the Legislature, which power is the mere application to the whole community of the maxim "*sic utere tuo, ut alienum non laedas.*"

Further on in the case Justice Magie also says: "Nor is there anything to render such legislation objectionable, because in some instances it may restrain the profitable use of private property, when such use in fact does not directly injure the public in comfort or health. For, to limit such legislation to cases where actual injury has occurred would be to deprive it of its most effective force. Its design is preventive, and to be effective it must be able to restrain acts which tend to produce public injury. Many instances of such an exercise of this power can be found. The State regulates the use of property in intoxicating liquors by restraining their sale, not on the ground that each particular sale does injury, for then the sale would be prohibited, but for the reason that their unrestricted sale tends to injure the public morals and comfort. The State is not

bound to wait until contagion is communicated from a hospital established in the heart of a city—it may prohibit the establishment of such a hospital there because it is likely to spread contagion. So, the keeping of dangerous explosives and inflammable substances, and the erection of buildings of combustible materials within the limits of a dense population, may be prohibited because of the probability or possibility of public injury. Such instances might be indefinitely multiplied, but these are sufficient to illustrate this case. The object of this legislation is to protect the public comfort and health. For that purpose the Legislature may restrain any use of private property which tends to the injury of those public interests. That the pollution of the sources of the public water-supply does so tend no one will deny.”

The case of the State of New Hampshire *v. Griffin*, 41 Lawyers' Reports (Annotated), 177, is in point. It was a case reserved by the Supreme Court for Rockingham county, New Hampshire, for the opinion of the full bench upon an appeal from a judgment convicting the defendant of depositing sawdust in a stream, contrary to the terms of a statute. The opinion is a well-considered one. It appears that a legislative act of New Hampshire provided that: “If any person shall throw, place, leave, or cause to be thrown, placed or left, any sawdust in Lake Massabesic, situated in Auburn and Manchester, or any stream tributary thereto, he shall be punished for the first offense by a fine not exceeding twenty dollars, or by imprisonment not exceeding thirty days, or both.” It was objected by the counsel for the defendant that the statute was in conflict with the constitution for three distinct reasons, namely, (1) because it deprived him of his property without compensation; (2) because it was an exercise, not of legislative, but of judicial power; and (3) because it was not an equal or uniform law, applicable equally to all persons, similarly situated, but operated only against those engaged in a particular business, in a particular part of the State. All of these points were duly considered and decided against the defendant.

In *Mugler v. Kansas*, 123 U. S. 623 (L. C. P. edition, vol. 31, p. 205), it was held that legislation by a State prohibiting the manufacture within her limits of intoxicating liquors, to be there sold or bartered for general use as a beverage, does not necessarily infringe any right, privilege or immunity secured by the constitution of the United States. It belongs to the legislative department to exercise what are known as the police powers of the State, and to determine primarily what measures are appropriate or needful for the protection of the public morals, the public health or the public safety, subject to the power of the courts to judge whether any particular law is an invasion of rights secured by the constitution. A prohibition simply upon the use of property for purposes that are declared by valid legislation to be injurious to the health, morals or safety of the community, cannot in any just sense be deemed a taking or appropriation of property

for the public benefit. The State cannot be stayed from providing for the discontinuance of any manufacture or traffic which is injurious to the public morals, by any incidental inconvenience which individuals or corporations may suffer. Proceedings in equity for the purposes indicated in the thirteenth section of the Kansas act, reviewed in the opinion, are not inconsistent with due process of law. A jury trial is not required in suits in equity brought to abate a public nuisance.

In *Watertown v. Mayo*, 109 Mass. 318, it is said that all rights to the use and enjoyment of property are subject to the regulation of police power of the State, which, like the power of taxation, is necessary to its existence, and which is implied in the idea of free civil government. This rule has its foundation in that maxim of all well-ordered society, which requires every one to use his own so as not to injure the equal enjoyments of others having equal rights of property. "To a great extent," says the Court, "the Legislature is the proper judge of the necessity for the exercise of this restraining power. It is not easy to prescribe its limits. The law will not allow rights of property to be invaded under the guise of a police regulation for the preservation of health or protection against a threatened nuisance; and when it appears that such is not the real object and purpose of the regulation, courts will interfere to protect the rights of the citizen. But a perversion of this power is not shown by the fact that the business restrained is a necessary and lawful business, which has not yet become a public nuisance in fact or been declared to be such by statute. The law most wisely interferes for the protection of the public by preventing in advance threatened and probable injury. Exposure to danger is itself an injury." A perpetual injunction was granted in this case to enjoin the defendant from carrying on the business of slaughtering cattle in a building in Watertown, and on appeal the decree awarding the injunction was affirmed.

The object of the act, and the duty of the courts to aid in giving it full effect when their aid is properly invoked, being clear, I now proceed to consider the means prescribed by the Legislature for securing its object:

II. The Means for Securing the Legislative Object.

The object of the legislative act is sought to be secured by its prohibitions. Those prohibitions are the law of the State. Citizens are presumed to have due regard for these prohibitions and to be law-abiding. If any of them violate the law by doing any of the prohibited acts he may be prosecuted in a summary proceeding for the penalty of \$100 prescribed in the act. Or, if the State Board of Health prefer so to do, instead of proceeding in a summary way to recover the penalty, it may apply to the Court of Chancery for an injunction "to prohibit the further violation" of the act. Such appli-

cation must be by a bill of complaint filed in the name of the State on its relation.

It will be observed that the State Board of Health is a public body, having imposed upon it only public duties, being invested with only public powers and exercising only public functions. It has no private rights.

It will be observed, further, that it is the chosen agent of the State for the enforcement of certain of its police powers.

It will be observed, again, that the bill of complaint, which it is authorized to file in the Court of Chancery, is not to be filed in *its* name for the enforcement of any of *its* powers. It is to be filed in the name of the *State* and for the enforcement of the powers of the *State*.

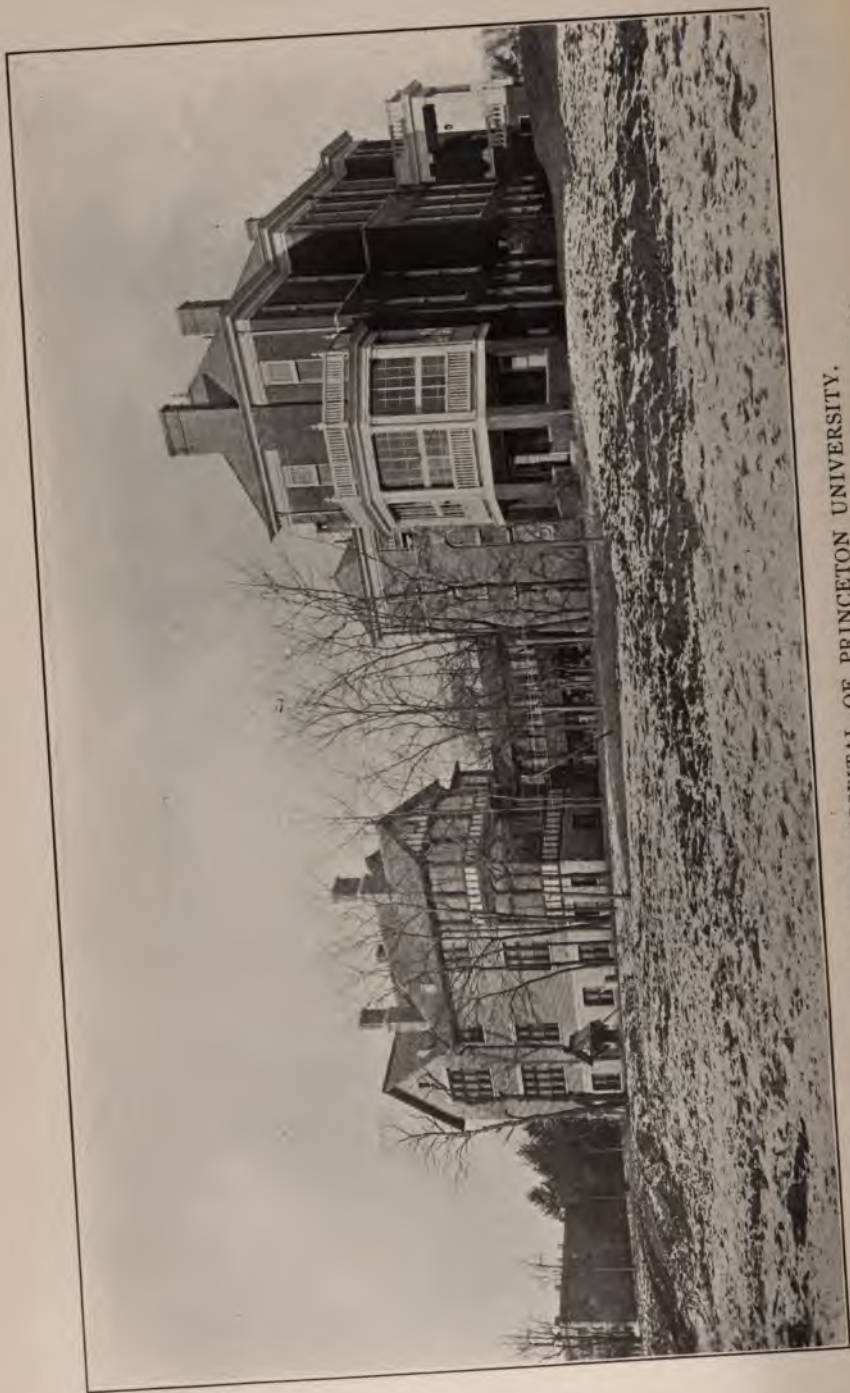
What, then, when such a bill is filed, is the duty imposed upon the Court of Chancery?

It is not the same as when a bill for injunction is filed by a *private party*. No private party is entitled to an injunction unless he proves that he is sustaining, or is about to sustain, substantial injury. But when the State, through the instrumentality of a grand jury, indicts a man for violating its criminal law against discharging into a stream any offensive matter calculated to render its waters impure, there is no obligation on the part of the State to prove on the trial of the indictment that any substantial injury has been done by the defendant. Nor can a defense that no substantial injury has been done be set up. This is settled, for our State at least, by *State v. Wheeler, supra*. And so, when the State, through the instrumentality of its State Board of Health, seeks in a summary proceeding to recover the penalty mentioned in the act now under review, it is not necessary to show substantial injury or actual harm to health by the defendant's act. And so, again, when the State, through the instrumentality of its State Board of Health, files a bill in the Court of Chancery for an injunction to prohibit the continuance of an act which the Legislature has declared unlawful, it is not necessary to show that the act is positively, at the time of applying for the injunction, injurious to health. All that need be shown is that the defendant is doing the condemned act. The principle that is to guide the court in every such case is the same as where the State, through the instrumentality of its Attorney-General, applies for an injunction. I refer to some cases which illustrate the principle:

In *Attorney-General v. Cockermouth Local Board*, 19 Eq. Cas. (L. R.) 172, Sir G. Jessel, Master of the Rolls, said: "The defendants in this case are a public body, authorized by act of Parliament to construct sewage works so that they shall not be a nuisance. Under the powers originally conferred on them they could not make outfall works outside their district, but a subsequent act of Parliament enabled them to go outside their district—that is to say, they may now take people's lands, and so on, and do what certainly is very likely to be

unpleasant to the inhabitants of another district which is not benefited by the works. But these powers are subject to this proviso: [His Honor read section 4 of the Local Government act (Amendment act), 1861, which is as follows: "Local boards may exercise the powers given by the forty-fifth section of 'the Public Health act, 1848,' also without their district, for the purpose of outfall or distribution of sewage, upon making due compensation, to be settled in the manner provided in the one hundred and forty-fourth section of 'the Public Health act, 1848,' provided, always, that nothing herein contained shall give, or be construed to give, powers to any local board to construct or use any outfall, drain or sewer for the purpose of conveying sewage or filthy water into any natural watercourse or stream, until such sewage or filthy or refuse water be freed from all excrementitious or other foul or noxious matter, such as would affect or deteriorate the purity and quality of the water in such stream or watercourse."] I do not mean to say that clause might not, by possibility, have been better drawn or expressed, but I think the meaning is pretty plain, and it means this: 'You shall not send your sewage into a natural stream until you have made it wholesome water—until you have got rid of all the noxious matter in it.' That, I think, is the effect of the clause, and if that is the meaning the next point is, what water is it that is not to be affected or deteriorated? You are not to affect or deteriorate the water in the river—what portion of the water? I cannot accede to the argument of the defendants that it merely means that you must not poison the whole river; for a river may be hundreds of miles long. I think it must mean that you are not to affect or deteriorate the water in the river at the point where the outfall is; and that if you at that point pollute the water you shall not enjoy the privilege given you by this act of Parliament of making an outfall outside your district. The act gives you this privilege and gives it on those terms. * * * Then this is an information by the Attorney-General against a public body, to enforce the terms of a public act of Parliament. Now, if I understand the law upon the subject, it is not necessary for the Attorney-General to show any injury at all. The Legislature is of the opinion that certain acts will produce injury, and that is enough. The case I have already referred to of the Attorney-General *v.* Oxford, Worcester and Wolverhampton Railway Company, is in point. There the Attorney-General would not even answer the affidavits of the defendants, to show there was no injury caused by the proceedings they were adopting. The Legislature is of opinion that it is desirable to preserve our natural streams in at least their present state of purity; it therefore has said that you shall not affect or deteriorate the water at all, and that the Court must assume that the deterioration of the water is an injury which is prohibited by the Legislature for good and sufficient cause.

"Again, if I look at the evidence in the case I can see very good



ISOLATION HOSPITAL OF PRINCETON UNIVERSITY.
(Isolation Hospital on the left, connected by corridor with General Hospital.)

reason for the course adopted by the Legislature. We had the evidence of scientific men to this effect—that there is always a probability of danger when sewage matter is thrown into a stream, because people may drink of that stream, and if any epidemic disease is prevalent in a town from which the sewage matter proceeds, that disease may be communicated to the inhabitants of another by the water. Well, that alone would be sufficient justification for the Legislature, if it entertained that opinion, inserting this enactment in the act of Parliament. That being so, I think I am bound, as regards the information, to grant an injunction to restrain the defendants from infringing the provisions of the act of Parliament.

“The bill stands upon a totally different footing. It is a bill by the local board of Workington alleging nuisance committed by the defendants. Now, I must say I cannot find any evidence of nuisance caused by the defendant's acts. The sewage is thrown into the river in comparatively small quantities, at a distance of eight or nine miles from the town of Workington. The water has been carefully analyzed at the intake of Workington, and no trace of the sewage can be discovered; that is to say, from some cause or other, that which was polluted water at or near the outfall has ceased to be polluted water by the time it arrives at Workington. That I take to be the effect of the evidence, and if the plaintiff board can only sue on the ground of nuisance, and they cannot prove nuisance, it follows that their bill must be dismissed.”

In *Attorney-General v. Shrewsbury Bridge Company*, 21 Ch. Div. 752, and 1 Eng. Rul. Cas. 567, the Attorney-General, at the relation of two shareholders in the defendant company and by two shareholders as plaintiffs, claimed an injunction to restrain the company from proceeding with their works. Justice Fry said: “The question which has been mainly argued is this: Had the Attorney-General a right under the circumstances to intervene without showing substantial injury to the public? It appears to me there is a conflict of authority on this point, or rather some want of uniformity in the various authorities. But, before considering the authorities, I will make this observation: This is clearly a case in which the defendant company, without any power (for their powers had come to an end), thought it fit to do certain acts which undoubtedly tended in their nature to interfere with public rights, and so tended to injure the public. The question is whether, under such circumstances, the Attorney-General is justified in interfering, though there is no evidence of actual injury to the public. In my judgment, he is entitled to do so, and the Court is bound to attend to his interference. One of the English cases on the subject is *Attorney-General v. Oxford, Worcester and Wolverhampton Railway Company*. There, at the instance of the Attorney-General, the Court restrained the opening of a railway not authorized by the board of trade, and Lord Romilly, Master of the Rolls, said that the view he took of the case was this—that undoubtedly the Attorney-General

might apply to the Court in case of a nuisance. It was properly said on the other side that in all such cases the Court required that the nuisance should be proved. But he was also of the opinion that the Attorney-General, as *parens patriæ*, might apply to the Court to restrain the execution of an illegal act of a public nature, provided it was established that the act was illegal and it affected the public generally. Again, in *Attorney-General v. Cockermouth Local Board*, Sir Jessel, Member of the Rolls, refused to grant an injunction on the bill, because he came to the conclusion that there was no evidence of any nuisance resulting to the plaintiffs from the defendants' acts. Nevertheless, at the instance of the Attorney-General, he granted an injunction to restrain the defendants from polluting the water of the river because that was expressly prohibited by the act of Parliament. There, as in the present case, there was no evidence of any actual injury, but there was evidence that the defendants were doing certain illegal acts, which tended in their nature to injure the public, and accordingly the injunction was granted, with costs. In the more recent case of *Attorney-General v. Great Eastern Railway Company*, the learned Lords-Justices appear to have differed somewhat in their opinions. If they had expressed any decided view affecting the present case, I need not say that I should have followed it. But, having regard to that difference of opinion, it appears to me that that case furnishes no distinct guide to me. But, when I examine the judgment of Lord-Justice James, who was most adverse to the rights of the Attorney-General, I think that, even according to his view, the present action would be maintained, for, commenting on *Attorney-General v. Cockermouth Local Board*, he said: 'The board were doing works which would or might probably poison a running stream, in direct violation of the law which prohibited them from committing a nuisance.' Just as there the acts which restrained without proof of injury were acts which in their nature tended to injure the public, so, in the present case, the acts which the Attorney-General sought to restrain were in their nature such as tended to injure the public. In coming, therefore, to the conclusion that this action can be maintained without proof of actual injury to the public, I think I am acting in accordance with the view of Lord-Justice James. There is, moreover, the authority of Lord Hatherly, in *Attorney-General v. Ely, Haddenham and Sutton Railway Company*. He said: 'The question is whether what has been done has been done in accordance with the law; if not, the Attorney-General strictly represents the whole of the public in saying that the law shall be observed.' Here the law has been broken in a manner tending to injure the public, and, in my judgment, the relators are entitled to costs. The costs have not been increased by adding the relators as plaintiffs, and I shall allow the whole of the costs now in dispute."

See, also, *London Association of Ship Owners and Brokers v.*

London and India Docks Joint Committee, 1892, vol. 3 (L. R.), p. 270.

This case differs from *Newark Aqueduct Board v. Passaic*, 18 Stew. Eq. 406, where an injunction was sought to restrain what appeared to be a prospective injury. The bill in that case had no such legislative authority as the bill in this case. In this case we depend on the facts showing corruption of the water, or tendency to corrupt it, *and the act of 1899*, as the justification for the injunction we pray for.

The provision authorizing the State Board of Health to file the bill in this case is similar to the provision contained in Gen. Stat. 1846, § 2, which has been sustained as valid legislation. See *State v. Jersey City*, 10 Dick. Ch. Rep. 116; same case affirmed, *Ib.* 591.

The means authorized to be adopted under the health laws for the protection of health are *preventive* rather than *punitive*. That fact must never be lost sight of in construing legislation like that under which the bill in this case has been filed.

As was said by Justice Knapp for the Supreme Court, in *Garrett v. State*, 20 Vr. 103, the "purpose which the Legislature had in view in creating boards of health was to supply additional means to *prevent* disease and discomfort such as might arise from contamination of air, water and food."

III The Facts of this Case, and the Law as Applied to those Facts.

I have preferred to consider the law upon which the bill is supposed to be founded before referring to the facts. For, it is quite natural, I think, that the first impression made upon the mind by reading the bill of complaint should be that it does not set out a case for equitable jurisdiction. Hoping that what has been said under the first two heads of this brief may have shown that our Court of Chancery may acquire jurisdiction to grant an injunction under the terms of chapter 41 of the Laws of 1899, without any allegation or proof of actual damage to any person or persons whomsoever, I now consider the facts of this case.

There is no dispute about the material facts of this case. They are all admitted. Here they are:

The defendant is a corporation and is engaged in the manufacture of paper.

Its factory is located on the banks of the Rahway river, in Milburn township, Essex county; it employs forty hands, is in continuous operation, day and night, and makes two tons of paper per day. (Testimony, p. 4).

Its raw stock consists of rags, burlaps, hemp, twines, cords and jute, 15 to 20 per cent. of which is colored stock (p. 8). It is purchased wherever it can be obtained to advantage (p. 70). It is of different grades. The shirt clippings are of two kinds, No. 1 being

the better clippings, and No. 2 being "not as clear and a little soiled by handling." The colored cuttings come from mills that make colored shirts and the twines are picked up around stores. (Thompson, p. 71.) The stock is sometimes soiled; and such soiled stock is sometimes accepted and overlooked. (Thompson, pp. 72, 73.)

The first process is to assort the stock over wire screens and rub each rag on the wire screens for the purpose of rubbing off dirt, which falls into drawers beneath the screen. (Thompson, pp. 73, 80.) It is then put through a chopping process in the rag-cutter (pp. 9, 73).

It is then ordinarily put into a rotary boiler, with chloride of lime, alkali and soda, and subjected to a steam bath at an unknown temperature, there being no thermometer connected with the boiler (pp. 9, 74, 124).

Some of the stock does not go through the rotary boiler and is not subjected to any steam bath. (Thompson, pp. 74, 75.)

Disease germs are not killed with any certainty except when subjected to a heat of at least 240 degrees, in a closed vessel, with live-steam. (Dr. Mitchell, p. 62.)

It is then taken to the washing machine or beating engine, with knives in it, where the rags are cut and "where the alkali is washed out of them and whatever dirt may have come from the rags, if any." (Thompson, p. 75.) This process continues for six or eight hours, fresh water being admitted at one end and escaping, with its impurities acquired while passing through the machine, at the other end. After six or eight hours of this process, and before being dumped out of the washing machine, the bleaching liquor (chloride of lime) is poured in. It is then dumped out in large vats, where it lies to bleach. (Thompson, pp. 75 to 77.)

The pulp, made in manner above indicated, is then mixed with water, carried in a thin sheet between rollers, the water squeezed out, the thin layers of pulp conveyed to hot driers, and so finally is turned out as paper (p. 10).

Mr. Van Gilder, the defendant's secretary, admits that in the cleansing process the defendant uses chloride of lime, alkali, soda-ash and ordinary quicklime (p. 13), and that considerable of the pulpy material escapes into the stream (p. 12).

The paper made at the plant is manila tint, and paper that is "*chemically pure white paper*" (p. 11).

All the foul substances taken up by the water in the process of the manufacture, including not only those that are held in solution, but quantities of dirt and of the pulpy materials, pass with the effluent through the raceway, into the Rahway river (pp. 5 and 39).

The discharge into the river is above the point in the river from which Rahway city takes its supply of water for domestic use. (Dr. Hunt, p. 16.)

Shippen Wallace, State Chemist, has analyzed a sample of water obtained by Dr. Hunt from the feeder, twenty-five yards above the

factory, and another sample from the raceway, about fifty yards below the mill, and a third taken from a faucet in Rahway city. The analysis was intended to show merely the fact that organic and inorganic materials were added to the water by the defendant.

The defendant's chemist, Axtell, went farther. He ascertained, in the samples analyzed by him, the quantity of free ammonia, albuminoid ammonia, nitrogen as nitrites and nitrates, and the quantity of oxygen required to oxidate the organic matter.

Mr. Wallace was not required to do all that Axtell did. It was not necessary. What was needed was proof of the discharge by the defendant into the river of factory refuse which corrupts or impairs the quality of the water. Nothing more. And both Mr. Wallace's and Mr. Axtell's analyses prove this conclusively. Here is a tabulated statement of the results of their analyses:

These analyses show a bad corruption of the water of the river. They fully verify what one knowing the process of manufacture by the defendant would expect. Every one of the seven analyses of water taken by Mr. Axtell from seven different points *below* the defendant's factory is worse, much worse, than any of his three samples of water taken from the steam *above* the factory. Mr. Wallace's analyses show the same condition.

The sources of this corruption are worthy of attention. It comes from soiled and colored rags, jute, twine, &c. Specimens were produced by Dr. Mitchell, the Secretary of the State Board of Health. There were rags evidently soiled with human excrement and with the discharges of women during their periods of menstruation. (Dr. Mitchell, pp. 56, 57, 58, 59.) The samples of water produced in court, taken from the tail-race just below the factory by Mr. Corley, the defendant's superintendent, show large quantities of foreign matter in it. (Dr. Mitchell, pp. 37, 38.) It is clear that the discharge corrupts and impairs, and tends to corrupt and impair, the quality of the water of the river. (Dr. Mitchell, p. 53.)

Mr. Axtell's scientific conclusions that the chemicals put into the stream by the defendant tend to purify the stream are of no value. He was employed to ascertain whether there was any positive proof that the discharges from the defendant's factory make the Rahway river water injurious to health. That is not the question. The question is, do the discharges corrupt or impair, or tend to corrupt or impair, the quality of the water? If the water of the river above the factory is impure (as Axtell alleges), the State Board of Health will reach the sources of that evil in due time. They are the State's agents to do that very thing. The defendant has no authority from the State to attempt to improve the quality of the water by putting chloride of lime, or any other chemicals, in it. In any event, it also put organic matter (*decomposable stuff*) into the water, and some of it filth of the worst kind, without subjecting it to any steam bath. Chloride of

lime, chloride of sodium (common salt), chloride of magnesia, the organic and inorganic materials discharged into the stream by the defendant, *corrupt* that stream. I do not say that they make the water injurious to health. They may do so. But that is not the point. You may put common salt into your glass of water, and, while it will not make it injurious to health, it corrupts or impairs its quality for drinking purposes. All kinds of corruption or impairment of the quality of potable waters is intended to be prohibited by the act of 1899. The title of the act is, "An act to secure the purity of the public supplies of *potable* waters in this State."

We are not dealing with the question as to whether certain mineral waters, impregnated with salts, are not sometimes prescribed for use by man. So is arsenic and other poisons. Pure potable waters are waters as free as possible from all salts and from all foreign substances. The much-advertised waters of the Poland and Underwood Springs, in Maine, are valued because they are almost chemically pure. The object of the act of 1899 is to secure a degree of purity in our public water-supplies that will approach as nearly as practicable to water that is chemically pure. Of course, the best that can be done will be far from that. But the State has declared that no factory refuse that will corrupt or impair, or *tend* to corrupt or impair, the quality of the water of any river that is used for potable purposes shall be discharged into such river above the intake of any city. That is plain language. It is the duty of the Court to see that it is enforced.

It is unnecessary for me to give more than a passing reference to the arguments of Mr. Axtell (who signs his reports "*F. C. Axtell, Ph.D.*"), to the effect that the defendant is actually engaged in a humanitarian work by treating the waters of the Rahway river with various chemicals and thereby improving its quality. The defendant is not the State's doctor, to put medicaments into its drinking water. Mr. Axtell's idea seems to be that chlorine is not in itself a thing that corrupts the quality of water for potable use. I say it does. He says when we find chlorine in water it suggests that there may be fecal matter there which "might contain pathogenic germs" (p. 88). I admit it. But, suppose there be fecal matter in water and that fecal matter be known to be free from pathogenic germs, is the water then to be deemed uncorrupted? Mr. Axtell's whole argument, to be found in all three of his reports, is founded on the assumption that water must have in it pathogenic germs, or be positively injurious to health, in order to justify the court in granting an injunction. He says "that calcium hypochlorite has been employed as a medicament in the treatment of typhoid fever and dysentery, in doses of from three to six grains," and that "should the water contain any free hypochlorite [which is extremely improbable] when it arrives at the city of Rahway, no fear need be felt as regards a possible deleterious result due to the presence of this substance in the water" (pp. 100, 101).

On page 100 he also says: "We must discriminate and distinguish

between the pollution and the contamination of a public water-supply. Pollution is always to be regarded as deleterious, while contamination may be innocuous, deleterious or beneficial. The results of the analyses, given above, prove that the effect of the discharge from the mill has been such as to exert a positively beneficial action on the quality of the water; and as long as the present conditions [such as the volume of the flow of water and the quantity and nature of the discharge from the mill] are maintained, it is difficult to see that any possible deleterious effect of such discharge on the quality of the water is to be anticipated."

It will thus be seen that he has wholly overlooked the fact that what the law prohibits is the doing of any act by which the quality of the water of any stream used by any city, town, &c., shall be corrupted or impaired *for drinking purposes*. I may have a glass of water chemically pure, but if I put into it common salt, or clay, or pure milk, I corrupt its quality *as drinking water*. And when it is remembered that there go into the Rahway river not only the salts formed by the chemical combination of chlorine with lime, soda, &c., but coloring materials and dirt contained in washings from the raw stock in the process of manufacture, we see how invaluable and useless for the purposes of this case are the scientific conclusions and speculations of Mr. Axtell.

Chemical analyses are valuable, for the facts which they prove, just as any other proof is. The analyses of Mr. Axtell and Mr. Wallace are so in this case. The rule to be applied in the consideration of these analyses, and the conclusion of Mr. Axtell, is that stated in *Goldsmid v. Tunbridge Wells Improvement Commissioners*, cited with approval in *Newark Aqueduct Board v. Passaic*, 18 Stew. Eq. 406, as follows: "Speaking with all possible respect to the scientific gentlemen who have given their evidence, and as to whom it is but just to say they have dealt with the case most ably and most impartially, I think that in cases of this nature much more weight is due to the facts which are proved than to conclusions drawn from scientific investigations. The conclusions to be drawn from scientific investigations are, no doubt, in such cases, of great value in aid of, or in explanation and qualification of, the facts which are proved, but in my judgment it is upon the facts which are proved, and not upon conclusions, the court ought, in these cases, mainly rely. * * * In my view of the case, therefore, the scientific evidence ought to be considered as secondary only to the evidence as to the facts."

I submit that we are entitled to an injunction as prayed for in the bill of complaint.

Records of Vital Statistics.—Beginning with the new century, the statistical year in New Jersey will hereafter conform to the calendar year. Heretofore the tabulation of births, marriages and deaths has been based upon records covering the year ending June 30th, but for the purpose of more ready comparison with the records of other States and countries the figures will, in the future, be given for the year ending December 31st. To admit of the use of the data contained in the records of the last six months of the calendar year 1900, the tables of vital facts have been prepared for this volume as in previous years, and the records are presented for the year ending June 30th, 1901. But in the next annual report it will be necessary to recombine the figures for the first half of the calendar year 1901 in order that the totals for the entire year may be made up. The new system of registration consists in the transcription of certain facts contained in the certificates of births, marriages and deaths for use in preparing a monthly statement of mortality, and also in the preparation of an index of the names of those who are certified as having been born or married and of those who have died. The transcription of all of the facts contained in the certificates into books has been discontinued, and the original records are now solely relied upon for reference. Protection is afforded against the fading of the ink in the original certificates by preparing and filing duplicates when the frequent searches disclose impairment of legibility. The certificates of death returned to the Bureau of Vital Statistics are, by law, required to be forwarded by the local registrars on or before the fifteenth day of each month, and the new system of monthly tabulation which has been established depends for its usefulness upon prompt and faithful compliance with this requirement. There has been much delay on the part of some registrars in making returns, and notices are being sent to those who are habitually dilatory, calling their attention to the important uses which vital records serve, and informing them that tabulation cannot proceed unless the returns are furnished, as the law provides.

Very respectfully,

HENRY MITCHELL,
Secretary.

October 31st, 1901.



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Summary of Reports from Local Boards of Health.

The inquiries addressed to local boards of health suggesting topics for the annual report of 1901 were sent to secretaries of local boards of health September 1st, 1901, as follows:

BOARD OF HEALTH OF THE STATE OF NEW JERSEY, }
TRENTON, September 1st, 1901. }

To Local Boards of Health:

Section thirty-seven of the act approved March 31st, 1887, amended by the act approved March 2d, 1901, reads as follows:

37. That the local board of health of every township, city, borough, town and other municipality shall, on or before the first day of October in each year, in addition to other reports required, prepare an annual report of the condition of the public health within the limits of its jurisdiction, stating therein any special cause for the deterioration of health or of hazard thereto, and shall therein answer any inquiries which may have been addressed to such local board by the state board of health, and such local board shall forward a copy of such report to the state board of health on or before the fifteenth day of October in each year; the clerical duty required in the preparation of such annual report shall be done by the secretary or clerk of the local board, who, upon receiving a certificate from the secretary of the state board of health that such annual report has been duly prepared and received by said state board on or before the said fifteenth day of October, shall be entitled to receive from the proper disbursing officer of the township, city, borough, town or other municipality for which the report is made the sum of two dollars for such clerical service.

It will be observed that the legislature has provided that in cases where the local secretary or clerk reports promptly and satisfactorily, he shall be entitled to receive \$2 from the treasurer of the municipality or township.

Local boards are requested to include in their reports replies to the accompanying inquiries, in addition to such other facts and statements as they may desire to present.

The State Board of Health desires to publish a comprehensive abstract of the reports of local boards, to show what degree of progress each sanitary district is making in the promotion and protection of the public health, and to this end local boards are requested to make a clear statement of the needs and sanitary defects of their districts, as well as to record the local hygienic advancement and give an account of official duties performed.

Very respectfully,

HENRY MITCHELL, M.D.,
Secretary.
(133)

134 REPORT OF THE BOARD OF HEALTH.

ANNUAL REPORT OF THE LOCAL BOARD OF HEALTH OF

1.....
(Name of sanitary district.)

County of....., for the year ending October 1st, 1901.

2. Names and addresses of the officers and members :

NAMES.	ADDRESSES.
.....President.
.....Member.
.....“
.....“
.....Secretary.
.....{ Registrar of
.....Vital Statistics.
.....Inspector.
.....“
.....“
.....“
.....Attorney.

3. Dwellings :

- (a) Number of tenement houses*.....
(b) Total number of dwellings.....

4. Births and Deaths :

- (a) Total number of births reported during year ending June 30th, 1901.....
(b) Total number of deaths reported during year ending June 30th, 1901.....
(c) Number of deaths under one year.....
(d) Has any physician or midwife failed to report any birth? If so, send name and address on separate sheet, and also send names of parents of child

5. Communicable diseases :

NAMES OF DISEASES.	Number of cases reported.	Number of deaths.	Number of houses inspected.	Number of outbreaks confined to first house.
Diphtheria
Membranous Croup.....
Scarlet Fever.....
Typhoid Fever†
Small-pox
Variceloid.....

* Having three or more families.

† If typhoid fever has occurred, please state the origin of each case.

6. Does your board furnish to physicians printed blanks for reporting communicable diseases ?
.....
7. Give names of any physicians who refuse or neglect to promptly report communicable diseases :
.....
8. Are all reports of communicable diseases entered in a book kept exclusively for that purpose ?
.....
9. Does your board provide blanks for the use of physicians in making reports of communicable diseases ?
.....
10. What officer of your board receives, records and transmits to Trenton reports of communicable diseases ?
.....
11. Isolation hospital :
 - (a) Is your board provided with satisfactory facilities for isolating cases of infectious diseases ?.....
 - (b) Where is hospital located ?.....
12. Water-supply (If a public water-supply has been introduced, please reply to the following inquiries):
 - (a) Have mains been extended during year ending October 1st, 1901 ?.....
 - (b) Number of dwellings connected with water-mains during year.....
 - (c) Total number of dwellings connected.....
 - (d) Sources of pollution.....
 - (e) Is water purified before it is delivered to consumers ?.....
 - (f) Describe purification works.....
 - (g) If recent analysis has been made, please send copy.
13. Sewerage (If sewers have been introduced, please reply to the following inquiries):
 - (a) Number of miles of public sewers.. ..
 - (b) Date when public sewers were introduced.....
 - (c) Total number of premises connected with sewers
 - (d) Number of premises connected with sewers during year ending October 1st, 1901.....
 - (e) Have any extensions of sewer-mains been made ?.....
 - (f) Does storm water enter sewers ?.....
 - (g) Methods of disposal
 - (h) Point of final discharge.....
 - (i) Ventilation of sewer-mains
 - (j) Maximum and minimum sizes of street mains.....
14. Garbage :
 - (a) How is it stored, collected, transported and disposed of ?.....
 - (b) Is garbage collected under contract ?.....
 - (c) Frequency of removal.....
 - (d) Number of vehicles, horses and men employed in garbage service.....

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- (e) Cost of garbage collection, removal and disposal for fiscal year ending
- (f) Are garbage, rubbish and ashes removed under supervision of the board of health?.....
- (g) Total number of cubic yards of garbage removed annually.....
- (h) Are the vehicles used for removing garbage satisfactory?.....
- (i) Has any nuisance been caused by the dumping of garbage or other refuse matter?.....

15. Rubbish and ashes :

Disposal of rubbish and ashes.....

16. Excreta :

- (a) Is control exercised by the board of health over the location and construction of privy vaults and cesspools?.....
- (b) Are any abandoned wells used for cesspools?.....
- (c) Number of privy vaults in use.....
- (d) Number of cesspools in use.....
- (e) Disposal of night soil.....

17. Stables :

Is construction of stable floors and manure receptacles controlled by ordinance?.....

18. Nuisances :

- (a) Number of complaints investigated during year ending October 1st, 1901.....
- (b) Number of nuisances abated.....
- (c) Any nuisances caused by slaughter-houses?.....
- (d) Any nuisances caused by offensive trades?.....

19. Illuminating oil :

Have any explosions of kerosene lamps occurred? (In future please report to the State Board of Health every such occurrence, and, if possible, obtain for examination a sample of the oil used).....

20. Dairies and milk depots :

Is there a regular periodical inspection of dairy premises and milk depots in your sanitary district?.....

Are records kept of such inspections, and do the records show (a) the character and source of the water-supply ; (b) the methods employed in washing cans and utensils, and in the (c) collection, (d) cooling, (e) transportation and (f) delivery of the milk?.....

21. Diseases of animals :

Please report any cases of contagious diseases of animals which occurred in your district during the year.....

22. Diseased meat :

During the past five years many carcasses of diseased meat, which were shipped from New Jersey to New York City, have been seized there and sent to the offal dock, and the disreputable and unlawful practice of sending diseased meat to market is still prevailing. Does it exist in your district? Chapter 85 of the laws of 1901 provides that a penalty of \$50 shall be imposed upon every person who sells diseased meat

23. Ice :

Is the cutting and sale of ice controlled by the board of health ?.....

24. Schools :

(a) Has medical inspection of the public schools of your district been established yet ?.....

(b) What is the number of unvaccinated school children in your district ?.....

25. House-to-house inspection :

(a) Does your board cause house-to-house inspections to be made at stated intervals ?.....

(b) Is any record kept of sanitary inspections ?.....

26. New constructions :

Has any hospital, disinfecting plant, garbage furnace, or other sanitary institution or apparatus been established ?.....

27. State bacteriological laboratory :

(a) Is there a sufficient number of repositories in your district for mailing-cases for sending specimens of diseased tissue for diagnosis to the State bacteriological laboratory ?.....

(b) If supply stations are desired, please suggest one or more centrally-located drug stores where they may be established

28. Cemeteries :

(a) Do cemetery keepers make records of all interments ?.....

(b) Are any burials made without burial permits ?.....

29. Suits at law :

Has any lawsuit been brought by your board for the enforcement of the health laws or ordinances ? If so, please report so much of the case or cases as may be useful for the guidance of other boards.....

30. Has gratuitous vaccination been offered to the public by your board during the past year ?

.....

31. Meetings :

How many meetings have been held by the board during the year ?.....

Signature, official title and
P. O. address of the person
filling out this report. {

ATLANTIC COUNTY.

Town of Absecon.—MEMBERS AND OFFICERS—T. J. Hamilton, Japhet Adams, Daniel Walter, Jr.; Peter B. Reed, Charles D. Krause; George B. Lutta, Secretary; T. W. Madden, M.D., Inspector; E. A. Higbee, Attorney, Atlantic City.

Total number of dwellings in the town is 153. Blanks for reporting communicable diseases are furnished to physicians. The secretary of the board receives and transmits reports of communicable diseases to the State Board of Health. Provision has been made for the isolation of cases of the dangerous communicable diseases. Two meetings were held.

Atlantic City.—MEMBERS AND OFFICERS—Wm. F. Koenke, Joseph E. Lingerman, Arthur H. Stiles, Elwood S. Johnson, Thomas D. McDevitt, Alfred W. Baily, M.D.; Wm. F. Clark, Secretary; Alfred T. Glenn, Registrar; Harry C. Beck, Health Inspector; Harry C. Koenke, Assistant Health Inspector; Thomas W. Clement, Assistant Health Inspector; Wm. H. Rice, Assistant Health Inspector; J. W. Hardcastle, Assistant Health Inspector; Curtis Frambes, Plumbing Inspector; Carlton Godfrey, Esq., Attorney.

Number of dwellings, about 5,000; tenement houses, 25. Communicable diseases were reported as follows: Diphtheria, 51—deaths, 6; membranous croup, 2—deaths, 1; scarlet fever, 21; typhoid, 29—deaths, 7; small-pox, 5. All physicians report communicable diseases promptly. The isolation hospital for the care of cases of communicable diseases is located near Ventnor, in Egg Harbor township. Number of dwellings connected with water-mains during the year, about 300. Total number of dwellings connected with water-mains, 4,550. Sewers were introduced in 1885. Total number of sewer connections, 4,400. New sewer connections made during the year, 875. Sewage is discharged into Beach thorofare. There are 30 miles of public sewers. Garbage is collected daily. Annual cost of garbage collection, \$10,000. There are about 300 privy vaults in use and 100 cesspools. Number of complaints investigated during the year, 2,000. Number of nuisances abated, 1,500. The garbage incinerating plant has been enlarged. There are no cemeteries in the city limits. One suit was brought for the recovery of penalty in a nuisance case. There were 32 meetings held by the board during the year.

Brigantine City Borough.—MEMBERS AND OFFICERS—Alonzo M. Smith, F. W. Willetts, George W. Blackman, Job B. Risley; James R. Bissess, Secretary.

ATLANTIC COUNTY—*Continued.*

Total number of dwellings, 39; number of hotels, 3. One nuisance was abated. Five meetings were held.

Buena Vista Township.—MEMBERS AND OFFICERS—Jacob Blazer, Folsom; Thomas H. Hults, Vineland; Edward J. Smith, Richland; Douglass Reed, Secretary, Buena; Alfred Pennock, Registrar, Buena.

Total number of dwellings, 350. Communicable diseases were reported as follows: Diphtheria, 8; scarlet fever, 40; typhoid fever, 2; small-pox, 3. The epidemic of scarlet fever was in part due to the fact that physicians were slow in making reports. All unvaccinated school children are being vaccinated. Eight meetings were held.

Egg Harbor City.—MEMBERS AND OFFICERS—George F. Breder, Theo. H. Boysen, M.D., H. G. Regensburg, J. U. Elmer, M.D.; V. P. Hofmann, Secretary.

Total number of dwellings, 400; 58 cases of diphtheria were reported; 8 complaints were investigated and 6 nuisances were abated. Twenty meetings were held.

Egg Harbor Township.—MEMBERS AND OFFICERS—Walter Fifield, Bakersville; John Blackman, Steelmanville; Theodore Smith, Scullville; A. R. Vickers, Secretary, Bakersville.

Total number of dwellings, 400. One case of diphtheria occurred. Four nuisances were abated. Five meetings were held.

Galloway Township.—MEMBERS AND OFFICERS—Daniel Mathews, Oceanville; Adolphus Johnson, Port Republic; John L. Purzner, Cologne; Anthony Kienzle, Secretary, Egg Harbor City; Edmund Madden, Inspector, Absecon.

One case of diphtheria and 1 of typhoid fever occurred. Two meetings were held.

Hamilton Township.—MEMBERS AND OFFICERS—Joseph Veal, Mays Landing; Andy Stewart; Edward Hazelton, Secretary; C. E. Saulsberry, M.D., Inspector, Mays Landing.

One case of scarlet fever was reported. Two nuisances were abated. No meetings were held.

Linwood Borough.—No organized board of health. James Farish, Borough Clerk.

ATLANTIC COUNTY—*Continued.*

Mullica Township.—MEMBERS AND OFFICERS—Reuben Brooker, Elwood; Chas. Saalman, Egg Harbor City; A. J. McKeone, Pleasant Mills; W. W. Phillips, Registrar, Elwood; John T. Irving, Secretary, Elwood.

One nuisance was abated. One meeting was held.

Pleasantville Borough.—MEMBERS AND OFFICERS—Lewis H. Barrett, Frank Rainer, Samuel Bartlett, John Sanders, Pardon R. Adams; Wilbur Reed, Secretary; R. M. Sooy, M.D., Inspector; E. A. Higbee, Attorney, Atlantic City.

Total number of dwellings, 360. One case of diphtheria and 2 of typhoid fever were reported. Three nuisances were abated. Twelve meetings were held.

South Atlantic City Borough.—MEMBERS AND OFFICERS—Charles Boggs, Josiah Norcross, David R. Ristine, P. J. Gilligan; Charles Hart, Secretary; Hon. Joseph Thompson, Attorney.

Weymouth Township.—MEMBERS AND OFFICERS—Andrew Campbell, Tuckahoe; Thomas Bailey, Tuckahoe; F. A. Smith, Dorothy; P. W. Flanagan, Secretary, Tuckahoe; Randolph Marshall, M.D., Inspector, Tuckahoe.

Total number of dwellings, 300. One meeting was held.

BERGEN COUNTY.

Allendale Borough.—MEMBERS AND OFFICERS—P. D. Rapelje, J. J. Pullia, John A. Williamson, Smith Roswell; J. M. Christopher, Secretary; Dr. R. R. Letts, Inspector.

Number of dwellings in borough, about 125. Two cases of scarlet fever were reported. Reports of communicable disease are received and transmitted by the borough clerk. Medical inspection of schools has been established. Monthly meetings are held by the board.

Bergen Township.—MEMBERS AND OFFICERS—Deidrich Tholke, Wood Ridge; Robert Erlich, Wood Ridge; Daniel L. Saviello, Secretary.

Total number of dwellings, 73. Three cases of scarlet fever were reported. Six meetings were held.

Bergen Fields Borough.—MEMBERS AND OFFICERS—H. C. Fricke, Chas. Briesacher, George DuBois, W. B. May, John J. Huyler.

BERGEN COUNTY—*Continued.*

Total number of dwellings, 140. Two cases of scarlet fever were reported. Four meetings were held by the board.

Carlstadt Borough.—MEMBERS AND OFFICERS—Henry Kreiling, Jr., Chas. Lanz, Wm. Fleischman, Joseph Kessler; Herman Foth, Secretary; Ernest F. Sickenger, Inspector.

Communicable diseases were reported as follows: Diphtheria, 10; membranous croup, 1; scarlet fever, 8; small-pox, 2. Thirty-four complaints were investigated. One suit was brought for violation of ordinances, a conviction resulting. Fourteen meetings were held.

Chester Township.—MEMBERS AND OFFICERS—Joseph Stokes, M.D.; Arthur J. Collins, George Brock; Benjamin Rogers, Secretary; F. G. Stroud, M.D., Inspector; Wm. D. Lippincott, Attorney. All of Moorestown.

Communicable diseases were reported as follows: Diphtheria, 28; scarlet fever, 10; typhoid fever, 4. Five meetings were held.

Following is a report of a sanitary inspection in Chester township:

To the Board of Health of the State of New Jersey:

GENTLEMEN—At the request of the board of health of Chester township an investigation was made of several nuisances in Moorestown, and I would respectfully report as follows:

Accompanied by the inspector of the board, the president of the board and the assessor, a nuisance was examined, located on Central avenue on the property of Mr. Thomas Gill. On the corner of Mr. Gill's property a cesspool is located, and the overflow from the cesspool is discharged under a culvert on the street. The local board of health was advised to immediately take action to have the nuisance abated, and in conference with Mr. Gill he stated that the overflow pipe would be immediately taken out. Complaint was also made of a large pigeon-loft on the same property, and this was examined. In the loft some hundred rabbits and 5,000 pigeons are kept. The place had been renovated within a few days, and no foul odors were distinguishable. The complainant stated that the place had not been cleaned for months, and that the conditions were such as to be a great cause of annoyance to the neighborhood. The local board of health was directed as to its powers in such matters, the statement being made that they had ample power to see that the place was kept clean, and if necessary, action should be begun before the grand jury or the court of chancery to stop the business. Another complaint was that the noise made by the birds was such as to disturb the people living in the neighborhood. The local board of health was directed not to take any action on this basis. The condition of the gutters along the street was also examined and suggestions were made to a member of the board of freeholders, who was present. A bridge under which the water stagnated, and from which foul odors arose, is to be at once taken up and the foul soil taken out.

A. CLARK HUNT.

BERGEN COUNTY—*Continued.*

Cliffside Park Borough.—MEMBERS AND OFFICERS—S. A. Brown, M.D.; Geo. W. Laird, Edward George, S. Wood McClave; R. H. Nutt, Secretary; J. H. Raas, Registrar.

Number of dwellings, 63; number of tenements, 8. One case of scarlet fever was reported. Three meetings were held.

Cresskill Borough.—MEMBERS AND OFFICERS—Aaron C. Demarest, Henry V. Westervelt, Archibald C. Worth; John W. Flecke, Secretary; Henry G. Cooper, Registrar; J. B. W. Lansing, M.D., Inspector, Tenafly.

One case of diphtheria was reported. Seven meetings were held.

Dumont Borough.—MEMBERS AND OFFICERS—D. D. Blauvelt, R. C. Dixon, G. Miller; J. E. Pratt, M.D., Inspector; Frank Hill, Registrar.

East Rutherford Borough.—MEMBERS AND OFFICERS—Dr. W. E. Ogden, A. Bolle, A. DeVries; W. E. Novo, Secretary; P. B. S. Hodges, Inspector; Luther Shafer, Attorney, Rutherford.

Total number of dwellings, 500. Three cases of diphtheria, 3 of scarlet fever and 1 of typhoid fever were reported. Complaints reported, 70, and 70 nuisances were abated. Two suits have been started by the board for violation of ordinances. Twelve meetings were held by the board.

Edgewater Borough.—MEMBERS AND OFFICERS—William Eickhoff, Charles F. Carloch, George Allison, John V. Signell; Edward Fischer, Secretary.

Total number of dwellings, 179; tenement houses, 9. One case of diphtheria, 1 of scarlet fever and 1 of typhoid fever were reported. Six nuisances were abated. Nine meetings were held.

Englewood City.—MEMBERS AND OFFICERS—Henry Booth, William C. Davis, P. L. Kenny, Dr. J. W. Proctor; Arthur Gatfield, Secretary; Robert Jamieson, Registrar; Harry B. Smith, Inspector.

Nine cases of diphtheria, 2 of scarlet fever and 2 of typhoid fever were reported. Number of dwellings connected with public water-supply, 840. Number of miles of public sewers, 14. Total number of premises connected with sewers, 577. Number of nuisances abated, 260. Seventeen meetings were held.

BERGEN COUNTY—*Continued.*

Englewood Cliffs Borough.—No organized board of health. John G. Ropes, Assessor, Fort Lee.

Total number of dwellings, 30.

Fairview Borough.—MEMBERS AND OFFICERS—Frederick W. Schneider, C. M. Driggs, W. G. Wingerath; G. A. Storms, Secretary; John C. Bush, Registrar; S. G. Wright, Attorney, Ridgefield.

Total number of dwellings, 125. Three cases of diphtheria and 1 of small-pox occurred. Two nuisances were abated. Twelve meetings were held.

Franklin Township.—MEMBERS AND OFFICERS—Daniel Van Houten, Wyckoff; John W. Courter, Campgaw; C. H. Bush, Campgaw; John W. Ackerman, Secretary, Wyckoff; E. W. Hamilton, M.D., Inspector, Oakland; Ernest Koester, Attorney, Hackensack.

One case of diphtheria, 12 of scarlet fever and 4 of typhoid were reported. Five nuisances were abated. The local board brought action against a person carrying on an offensive trade, and the establishment was removed to Preakness. Ten meetings were held.

Garfield Borough.—MEMBERS AND OFFICERS—J. Vander Plaat, Jr.; G. S. Davenport, M.D.; Franz Bierman, John Karl; P. J. Scanlon, Secretary; F. C. Hoff, Inspector; A. D. Sullivan, Attorney.

Total number of dwellings, 500; tenement houses, 25. Five cases of diphtheria, 3 of scarlet fever, 1 of typhoid fever and 4 of small-pox were reported. Total number of dwellings connected with public water-supply, 150. Connections made during the year, 25. Number of complaints investigated, 50. Number of nuisances abated, 60. Twelve meetings were held.

Hackensack City.—MEMBERS AND OFFICERS—Robert G. Wool, John McD. Gamewell, Wm. Ammerman, Lemuel Lozier, Samuel F. Cressy, Tunis A. Haring, John L. Covert, C. E. Eckerson; Dr. F. Hallett, Medical Inspector; Robert Ballagh, Inspector; Milton Demarest, Attorney.

Twenty-five cases of diphtheria, 18 of scarlet fever, 8 of typhoid fever and 1 of small-pox were reported. Number of premises connected with sewers during the year, 63. Number of complaints investigated, 49. Twelve meetings were held.

BERGEN COUNTY—*Continued.*

Harrington Township.—MEMBERS AND OFFICERS—Wm. L. Lindeman, Closter; Joseph F. Mount, Haworth; John Van Blarcom, Norwood; Wm. J. Demarest, Secretary, Norwood; Lewis B. Parcels, M D., Inspector, Closter; L. Campbell, Attorney, Hackensack.

Total number of dwellings, 741. Eight cases of scarlet fever were reported. Nine nuisances were abated. Eighteen meetings were held.

Hasbrouck Heights Borough.—MEMBERS AND OFFICERS—Frank S. Flagg, A. K. Goodrich, E. L. D. Hester, Jas. S. Valentine; John G. Martin, Secretary.

Total number of dwellings, 280. Seven cases of diphtheria, 1 of scarlet fever and 2 of typhoid fever were reported. One nuisance was abated. Eight meetings were held.

Hohokus Township.—MEMBERS AND OFFICERS—Henry A. Winter, [Ramseys; John C. Ryerson, Ramseys; Edwin J. Carpenter, Ramseys; John Ackerman, Secretary, Wyckoff; Dr. James W. Collins, Inspector, Ramseys; Dr. C. P. De Yoe, Inspector, Ramseys; J. W. De Yoe, Attorney, Ramseys.

Two cases of diphtheria and 43 of scarlet fever were reported. Five nuisances were abated. Five meetings were held.

Leonia Borough.—MEMBERS AND OFFICERS.—J. T. Wyckoff, M.D.; Frederick West, Edward Erb, Arthur D. Bogert, Theodore Goesser; H. M. Thompson, Secretary; Wm. M. Senfert, Attorney, Englewood.

Total number of dwellings connected with public water-supply, 80. Ten meetings were held.

Little Ferry Borough.—MEMBERS AND OFFICERS—Wm. H. Soll, Chas. Heuer, Richard Van Sadars; Abraham W. Woods, Secretary; Dr. L. P. Knapp, Inspector, Hackensack.

Total number of dwellings, 188. One case of diphtheria, 1 of scarlet fever and 1 of small-pox were reported. Three nuisances were abated. All school children in the borough were vaccinated. Fourteen meetings were held.

Lodi Borough.—MEMBERS AND OFFICERS—James J. Mason, John Hagerty, Christopher Tattersall, Walling Van Vorst; Jacob Van Hook, Secretary; E. E. Conover, Inspector, Hasbrouck Heights.

Total number of dwellings, 300. Four cases of diphtheria, 4 of scarlet fever and 5 of typhoid fever were reported. Total number

BERGEN COUNTY—*Continued.*

of dwellings connected with public water-supply, 130. Number of connections made during the year, 12. Number of complaints investigated, 7. Nuisances abated, 5. Twelve meetings were held.

Lodi Township.—MEMBERS AND OFFICERS—Herman Schmidt, Wood Ridge; Peter Strunk, Wood Ridge; August Schiefer, Little Ferry; Julius Pries, Secretary, Wood Ridge.

Total number of dwellings, 119. Two nuisances were abated. Three meetings were held.

Maywood Borough.—MEMBERS AND OFFICERS—P. Thoma, G. L. Jaeger, F. T. May, C. Schminke, J. R. Davies, W. Widnall, Jr., Secretary.

Eight cases of diphtheria were reported. Two complaints were investigated. Five meetings were held.

Midland Township.—MEMBERS AND OFFICERS—David H. Hopper, Valetta; Jacob H. Blauvelt, Ridgewood; John G. Zabriskie, Rochelle Park; John D. Bogert, Secretary, Ridgewood; William L. Vroom, M.D., Inspector, Ridgewood; Clarence Mabie, Attorney.

One case of scarlet fever, 1 of diphtheria and 1 of typhoid fever were reported. One nuisance was abated. Three meetings were held.

Midland Park Borough.—MEMBERS AND OFFICERS—Thomas Holt, Midland Park; John Klopman, Wortendyke; Jacob Leenas, Secretary, Wortendyke; William L. Vroom, M.D., Inspector, Ridgewood; Cornelius Doremus, Attorney, Ridgewood.

Total number of dwellings, about 275. One case of scarlet fever was reported. One nuisance was abated. No meetings were held.

Montvale Borough.—MEMBERS AND OFFICERS—Eugene Malcherbe, President; John B. Hering, Registrar.

No organized board of health.

Old Tappan Borough.—MEMBERS AND OFFICERS—James J. O'Connor, River Vale; John Mauer, Jr., Tappan, N. Y.; Emmet Post, Tappan, N. Y.; Joseph Flate, River Vale; R. B. Haring, Secretary, Tappan, N. Y.

One case of diphtheria and 5 of scarlet fever were reported. Four meetings were held.

BERGEN COUNTY—*Continued.*

Orville Township.—MEMBERS AND OFFICERS—Edward West, Jr., Hohokus; James Vandyne, Waldwick; Lewis Terhune, Waldwick; B. A. Ver Nooy, M.D., Waldwick; J. B. Ver Nooy, Secretary, Waldwick.

Total number of dwellings, 200. Nine cases of diphtheria and 1 of typhoid fever were reported. One nuisance was abated. Two meetings were held.

Palisade Township.—MEMBERS AND OFFICERS—I. Ely Collins, New Bridge; Ignatz Dunst, New Milford; I. H. Vanderbeck, Dumont; Ralph Saier, Cresskill; Wm. Ely, Secretary, New Bridge; Dr. Ackerman, Inspector, Oradell; Wm. M. Seufert, Attorney, Englewood.

Palisades Park Borough.—MEMBERS AND OFFICERS—Chas. H. Lozier, Sr.; A. I. Parker, A. L. Phipps, Wm. Eichenlaub, Paul Herzog; M. E. Jenkins, Secretary.

Total number of dwellings, 135. Thirteen cases of diphtheria and 5 of scarlet fever were reported. Forty dwellings are connected with public water-supply and 30 premises are connected with sewers. Two complaints were investigated and 1 nuisance was abated. Nineteen meetings were held.

Park Ridge Borough.—MEMBERS AND OFFICERS—H. C. Neer, M.D.; Adolph Frohn, Walter Ellisen, Peter Nelson; E. W. Landes, Secretary; Chas. E. Terhune, Inspector.

Total number of dwellings, 259. Eleven cases of scarlet fever were reported. Seven meetings were held.

Ridgefield Borough.—MEMBERS AND OFFICERS—Wm. B. Reuckart, B. S. Tedmon, J. G. McGill, E. Robinson; B. F. Underwood, Secretary; S. G. Wright, Attorney.

Total number of dwellings, 145. One case of diphtheria and 1 of scarlet fever were reported. Total number of dwellings connected with water-mains, 100. One nuisance was abated. Eight meetings were held.

Ridgefield Township.—MEMBERS AND OFFICERS—John Brown, James Burns, John A. Brandt, Thomas F. Mallon, Secretary, Fort Lee; Joseph Huger, M.D., Inspector; Peter W. Stagg, Attorney.

Total number of dwellings, 500. Communicable diseases were reported as follows: Diphtheria, 10; scarlet fever, 7; typhoid fever,

BERGEN COUNTY—*Continued.*

1. Forty dwellings are connected with the public water-supply. Complaints investigated, 20. Nuisances abated, 12. Eighteen meetings were held.

Ridgefield Park Village.—MEMBERS AND OFFICERS—Hugh Innes, Henry Leinweber, John W. De Groat, Dr. H. C. Elsing; Edgar T. Bonds, Secretary; S. A. Wilcox, Registrar.

One case of diphtheria, 6 of scarlet fever and 4 of typhoid fever were reported. A new sewer system is being constructed. Three nuisances were abated. Twelve meetings were held.

Ridgewood Village.—MEMBERS AND OFFICERS—C. P. Crouter, J. R. Stevens, L. Terwilliger, J. H. Christopher, W. L. Vroom; J. Blauvelt Hopper, Secretary; Thos. Terhune, Registrar; Dr. J. T. De Mund, Inspector; Judge D. D. Zabriskie, Attorney.

Two cases of diphtheria and 5 of scarlet fever occurred. Twelve meetings were held.

Riverside Borough.—MEMBERS AND OFFICERS—J. A. Jenkins, Cherry Hill; F. G. Stebbins, River Edge; James A. Vanderbeek, River Edge; Wm. W. Herrick, Secretary, River Edge; J. A. Weston, Registrar; Geo. Ballaugh, Inspector, Hackensack; G. H. McFadden, M.D., Inspector, Hackensack; Milton Demarest, Attorney, Hackensack.

Total number of dwellings, 150. Three cases of scarlet fever occurred. Sixty dwellings are connected with the public water-supply and 45 premises are connected with sewers. Two nuisances were abated. One suit was brought for violation of the plumbing ordinance. Seven meetings were held.

Rutherford Borough.—MEMBERS AND OFFICERS—George B. Gale, M.D.; J. C. Sares, F. M. Buckles, Charles Calhoun, M.D.; Charles Van Winkle; P. H. Maison, Secretary; Hon. John M. Bell, Attorney.

Total number of dwellings, 1,000. Communicable diseases were reported as follows: Diphtheria, 8; scarlet fever, 29; typhoid, 4. Seven hundred premises are connected with sewers. Number of nuisances abated, 120. Fifteen meetings were held.

Saddle River Borough.—MEMBERS AND OFFICERS—U. Savoy, F. L. Blackledge, Jacob O. Ackerman; T. Nelson Woodruff, Registrar.

Total number of dwellings, 107. Two meetings were held.

BERGEN COUNTY—*Continued.*

Saddle River Township.—MEMBERS AND OFFICERS—William A. Ackerman, Warren Point; John Strehl, Fair Lawn; Sela Doremus, Dundee Lake; Isaac A. Hopper, Secretary, Fair Lawn.

Six cases of diphtheria, 6 of scarlet fever and 2 of typhoid fever were reported. Two nuisances were abated. Five meetings were held.

Teaneck Township.—MEMBERS AND OFFICERS—William Bennett, Englewood; Robert Stevenson, Englewood; Peter I. Ackerman, Hackensack; Jonathan Hawkins, Secretary, Englewood.

Four meetings were held.

Tenafly Borough.—MEMBERS AND OFFICERS—J. J. Haring, M.D.; Stephen G. Clarke, Richard Delahanty; Frederick L. Colver, Secretary; J. B. W. Lansing, M.D., Inspector; E. W. Wakelee, Attorney, Demarest.

Upper Saddle River Borough.—MEMBERS AND OFFICERS—Herman S. Hopper, Saddle River; Levi C. Fredericks, Saddle River; John Swartz, Saddle River; Wm. Ferwilleger, Ramseys; Edward H. Smith, Ramseys; Henry Zabriskie, Secretary, Saddle River; A. A. Zabriskie, Registrar, Saddle River; Dr. B. F. Ver-nooy, Inspector; Hon. D. D. Zabriskie, Attorney.

Total number of dwellings, 84. Eight meetings were held.

Washington Township.—MEMBERS AND OFFICERS—Daniel Omara, Etna; Peter J. Westervelt, Westwood; Edward C. Sarson, Westwood; Nicholas Cleveland, Secretary, Westwood.

Six meetings were held.

Woodcliff Borough.—MEMBERS AND OFFICERS—S. B. Reed, Woodcliff; David H. Tice, Saddle River; John H. Wortendyke, Woodcliff; Garret J. Ackerman, Park Ridge; William English, Woodcliff; G. J. Wortendyke, Secretary, Woodcliff.

One case of scarlet fever was reported. One meeting was held.

Wood Ridge Borough.—MEMBERS AND OFFICERS—Joseph H. Schmitt, Isador Lazard, Saul Fischer; Wm. H. White, Secretary; Henry W. Ostrouski, Inspector; Luther Shafer, Attorney, Rutherford.

Total number of dwellings, 100. Ten meetings were held.

BURLINGTON COUNTY.

Beverly City.—MEMBERS AND OFFICERS—Reuben P. Haines, John C. Currie, Charles Parsons, Jr.; John Allen, George Smith; B. F. Soby, M.D., Secretary; Chas. F. Richardson, Inspector.

Total number of dwellings, 530. Five cases of diphtheria, 19 of scarlet fever and 3 of typhoid fever were reported. Number of dwellings connected with water-supply, 238. The city has no public sewer system. Fourteen complaints were investigated and 14 nuisances abated. Twenty meetings have been held by the board during the year.

Bordentown City.—MEMBERS AND OFFICERS—Samuel E. Burr, David R. Brown, Dr. L. D. Tebo, Dr. C. D. Mendenhall, Samuel R. Magee; Dr. Wm. H. Shipps, Secretary; I. E. Antrim, Attorney.

Total number of dwellings, 700. Communicable diseases were reported as follows: Diphtheria, 5; scarlet fever, 1; typhoid fever, 11. The water-supply, which is obtained from Crosswicks creek, is polluted by sewage discharged into the Delaware river, Raritan canal and Crosswicks creek. The water is filtered before delivery to consumers. A portion of the town is sewered, and the sewage is discharged into Crosswicks creek, above the water intake. Complaints investigated during the year, 135. Nuisances abated, 105. Thirteen meetings were held by the board.

Bordentown Township.—MEMBERS AND OFFICERS—Dr. Wm. H. Shipps, Wm. Warrack, F. W. Taylor, George Stricker; Milton R. Cox, Secretary; Caleb Allen, Registrar. All of Bordentown.

Total number of dwellings, 125. One nuisance was abated. Twelve meetings were held.

Burlington City.—MEMBERS AND OFFICERS—John B. Cassady, M.D.; Neal D. Keeler, Thomas H. Birch, Alfred P. Silpath, Wm. C. Farmer; Wm. M. Jeffries, Secretary; J. Frank Cline, Registrar.

Total number of dwellings, 1,604. Three cases of scarlet fever and 7 of typhoid fever were reported. Twenty new connections were made with water-mains during the year. The water-supply is obtained from the Delaware river. Sewers are being introduced. Gar-

BURLINGTON COUNTY—*Continued.*

bage is collected twice each week, and the cost of collection is \$36 per month. Nuisances investigated and abated, 163. Fifteen meetings were held by the board.

Chesterfield Township.—MEMBERS AND OFFICERS—Benjamin H. Middleton, Crosswicks; Chas. E. Wallace, Chesterfield; Edward M. Ridgway, Crosswicks; Newton H. Chaffee, M.D., Chesterfield; Chas. B. Holloway, Secretary, Chesterfield.

Number of dwellings, 285. One case of scarlet fever was reported. Two meetings were held.

Cinnaminson Township.—MEMBERS AND OFFICERS—Clayton Conrow, Cinnaminson; William Schmerer, Cinnaminson; Isaac Evans, Palmyra; Joshua D. Janney, M.D., Cinnaminson; Timothy Morton, Secretary, Parry; Wm. D. Lippincott, Attorney, Moorestown.

Two cases of scarlet fever were reported. Two meetings were held.

Delran Township.—MEMBERS AND OFFICERS—George Friday, Bridgeboro; Alexander Bright, Bridgeboro; Samuel Caldwell, Bridgeboro; Daniel A. Kendall, Secretary, Riverton; James Richardson, Inspector, Riverside.

Number of dwellings, 217. Two cases of diphtheria and 11 cases of scarlet fever were reported. Two meetings were held.

Eastampton Township.—MEMBERS AND OFFICERS—J. M. Reeve, Smithville; H. W. Githens, Smithville; Joseph R. Stiles, Mt. Holly; Chas. H. Dennis, Secretary, Smithville; Dr. Vandever, Inspector, Mt. Holly; C. Matlack, Attorney, Mt. Holly.

Number of dwellings, 70. One case of diphtheria and one of scarlet fever were reported. Four meetings were held.

Evesham Township.—MEMBERS AND OFFICERS—Charles E. Heisler, J. W. Powell, W. J. Evens, S. D. Farrow; P. V. B. Stroud, M.D., Secretary, Marlton.

Total number of dwellings, 96. Two meetings were held.

Fieldsborough Borough.—MEMBERS AND OFFICERS—William Leonard, August Beller, Joseph V. Carter; William Leatherbury, Secretary; Samuel Church, Inspector.

Total number of dwellings, 112. Four cases of diphtheria occurred. One nuisance was abated. Four meetings were held.

BURLINGTON COUNTY—*Continued.*

Florence Township.—MEMBERS AND OFFICERS—Charles Lynch, Dr. David Baird, George Beatty, William Kimball; Walter Scully, Secretary. All of Florence.

Five cases of typhoid fever occurred. One nuisance was abated. Two meetings were held.

Medford Township.—MEMBERS AND OFFICERS—Joseph H. Haines, L. L. Sharp, M.D; R. S. Braddock, M.D.

Mt. Laurel Township.—MEMBERS AND OFFICERS—Richard G. Dudley, Moorestown; Samuel B. Lippincott, Moorestown; Wm. A. Wilkins, Masonville; Wm. P. Lippincott, Hartford; Nathan Thorn, Inspector, Moorestown.

Twelve cases of small-pox were reported. Eight meetings were held.

Northampton Township.—MEMBERS AND OFFICERS—Fred. Shemeley, James Shrene, T. L. Akins; M. H. Girven, Secretary; R. H. Parsons, M.D, Inspector; Charles K. Chambers, Attorney. All of Mt. Holly.

Six cases of diphtheria, 6 of scarlet fever and 3 of typhoid fever were reported. Nine hundred dwellings are connected with the public water-mains and 200 dwellings are connected with sewers. Ten nuisances were abated. Fourteen meetings were held.

Pemberton Borough.—MEMBERS AND OFFICERS—Anthony J. Morris, J. G. Montgomery, William H. Smith, Harry Norcross, Harry Ridgway; John H. Antrim, Secretary.

Riverton Borough.—MEMBERS AND OFFICERS—John C. S. Davis, Charles L. Flanagan, Albert J. Briggs, Charles C. Reinhard; Alex. Marcy, Jr., Secretary; Jacob Cottrell, Registrar.

Total number of dwellings, 325. Two cases of diphtheria, 13 of scarlet fever and 1 of typhoid fever were reported. Three hundred dwellings are connected with the public water-supply. Number of water connections during past year, 21. Number of premises connected with sewers, 100. Number of nuisances abated, 6. Six meetings were held.

Springfield Township.—MEMBERS AND OFFICERS—Thomas J. Warren, Wrightstown; Thomas L. Asay, Jacksonville; Allan M. Cox, Juliustown; E. D. Main, M.D., Sykesville; Theo. F. Wright, Secretary, Jobstown; Chas. K. Chambers, Attorney, Mt. Holly.

BURLINGTON COUNTY—*Continued.*

Total number of dwellings, 310. Two nuisances were abated. Two meetings were held.

Washington Township.—MEMBERS AND OFFICERS—J. C. Lane, Lower Bank; Thos. H. Sooy, Green Bank; George W. Thomas, Jenkins Neck; Walter S. Sooy, Secretary, Green Bank; J. E. Carry, M.D., Inspector, Lower Bank.

One case of typhoid fever occurred. Two meetings were held.

Westampton Township.—MEMBERS AND OFFICERS—Stuart M. McFarland, Rancocas; Firman Dubell, Mt. Holly; Clarence Loveland, Mt. Holly; Hudson B. Haines, Secretary, Rancocas.

CAMDEN COUNTY.

Camden City.—MEMBERS AND OFFICERS—Henry H. Davis, M.D.; Reuben H. Gaskill, Chas. Watson, S. G. Bushey, M.D.; M. F. Middleston, M.D.; Joseph S. Baer, M.D.; J. W. Fithian, M.D.; Eugene B. Roberts, Secretary; H. C. Kramer, Registrar; John F. Leavitt, M.D., Inspector; Henry B. Francis, Inspector; Joseph A. Starr, Inspector; J. O. George, D.V.S., Inspector; E. G. C. Bleakey, Attorney.

Total number of dwellings, 16,800. Number of tenement houses, 40. Communicable diseases were reported as follows: Diphtheria, 364, with 78 deaths; membranous croup, 24, with 16 deaths; scarlet fever, 164, with 4 deaths; typhoid fever, 37, with 4 deaths; small-pox, 3. Communicable diseases are promptly reported by physicians. Total number of dwellings connected with water-mains, 13,000. New connections made during the year, 600. Public sewers were introduced in 1866, and there are now 48 miles of sewers. Total number of sewer connections, 11,250. Number of premises connected with sewers during the year, 804. Sewage is discharged into the Delaware river and Cooper's creek. Garbage is collected three times each week in covered wagons and burned in the crematory. Number of complaints investigated during the year, 1,166. Number of nuisances abated, 986. Four suits for recovery of penalty for violation of ordinances were instituted and decided in favor of the board. Seventeen meetings were held by the board.

Centre Township.—MEMBERS AND OFFICERS—Wm. H. Bray, Mt. Ephraim; Abram E. Rowand, Mt. Ephraim; Howard M. Haines, Haddon Heights; Dr.

CAMDEN COUNTY—*Continued.*

Oran A. Wood, Magnolia; John H. Jackson, Secretary, Magnolia; Frank D. Weaver, Attorney, Haddonfield.

Total number of dwellings, 481. Five cases of diphtheria and 6 of typhoid fever were reported. Two meetings were held.

Chesilhurst Borough.—No organized board of health. Albert Ladynski, Borough Clerk.

Collingswood Borough.—MEMBERS AND OFFICERS—Thomas Jack, Frank Bond, W. A. Grissin, Benj Mahan, Fred. C. Taylor, George P. Sutton; Robert S. Duff, Secretary; Edward S. Sheldon, M.D., Inspector; Ritner Shinn, Sanitary Inspector; Howard L. Miller, Attorney.

Number of dwellings, 425 (ap.) Three cases of diphtheria, 4 of scarlet fever and 2 of typhoid fever were reported. Five and one-half miles of public sewers have been laid and about 20 premises have been connected. The sewage is treated by filtration and afterward discharged into Newton creek, opposite West Collingswood. Twenty-five nuisances were abated. Fifteen meetings have been held.

Delaware Township.—MEMBERS AND OFFICERS—Richard C. Kaighn, Ellisburg; Watson Matlack, Haddonfield; Joseph Hinchman, Merchantville; W. B. Jennings, Secretary, Haddonfield; W. B. Graff, Registrar, Haddonfield.

Three meetings were held.

Gloucester City.—MEMBERS AND OFFICERS.—George W. Turner, Edward J. O'Hara, John A. Uibel; David Lane Secretary; Chas. A. Burdsall, Inspector; Wm. J. Thompson, Jr., Attorney.

Forty-two cases of small-pox were reported. Twelve meetings were held.

Gloucester Township.—MEMBERS AND OFFICERS—John M. Stetser, Chews; James McWilliams, Cross Keys; Wm. M. Godfrey, Blackwood; Willard T. Gibbs, Secretary, Clementon; Chas. King, Attorney, Stratford.

Total number of dwellings, 2,000. Four cases of diphtheria, 7 of scarlet fever and 2 of typhoid fever were reported. One complaint was investigated. Six meetings were held.

CAMDEN COUNTY—*Continued.*

Haddon Township.—MEMBERS AND OFFICERS—Samuel Wood, Haddonfield; Howard C. Walton, Wood Lynne; Chas. H. Schnitzler, Orston; James Macauley, Secretary, Westmont; W. B. Jennings, M.D., Inspector, Haddonfield; Chas. R. Stevenson, Attorney, Haddonfield.

Fourteen cases of diphtheria, 3 of scarlet fever, and 1 of typhoid fever were reported. Five nuisances were abated. Fourteen meetings were held.

Haddonfield Borough.—MEMBERS AND OFFICERS—Dr. L. L. Glover, Chas. H. Hillman, Edward B. Austin, William J. Boning; William H. Harrison, Secretary; Dr. William B. Jennings, Inspector; Chas. R. Stevenson, Attorney.

Total number of dwellings, 600. Seven cases of diphtheria and 5 of typhoid fever were reported. Six hundred dwellings are connected with the public water-mains. A new sewer system will soon be introduced. Number of nuisances abated, 10. Twelve meetings were held.

Merchantville Borough.—MEMBERS AND OFFICERS—Dr. J. W. Marcy, A. H. Moses, F. W. Kleinz, D. R. Finley, J. E. Vankirk; W. B. Stewart, Secretary; Samuel Lewis, Inspector.

Total number of dwellings about 400. One case of diphtheria and 2 of typhoid fever occurred. Fourteen nuisances were abated. Nine meetings were held.

Voorhees Township.—MEMBERS AND OFFICERS—Edward C. Gardner, Kirkwood; John McCulley, Kirkwood; Charles Dixon, Gibbsboro; S. H. Gardiner, Secretary, Ashland.

Total number of dwellings, 197. One case of diphtheria and 4 cases of typhoid fever were reported.

Waterford Township.—MEMBERS AND OFFICERS—C. D. Heath, Berlin; F. O. Stem, M.D., Berlin; Wm. N. Haines, Berlin; Wm. L. Walker, Waterford; H. N. Gillon, Secretary, Berlin.

Eight cases of diphtheria and one of scarlet fever were reported. Five meetings were held.

Winslow Township.—MEMBERS AND OFFICERS—Joseph G. Strock, Cedar Brook; Joseph R. Imhoff, Winslow; Charles Jessup, Waterford; Michael G. Burdall, Secretary, Tansboro.

One case of diphtheria occurred. Two meetings were held.

CAMDEN COUNTY—*Continued.*

Wood Lynne Borough.—MEMBERS AND OFFICERS—Oscar B. Test, Robert A. Rockhill, Samuel Smith, Lemuel S. Ware, Chas. F. Cogswell, Secretary.

Twenty-seven dwellings are connected with the public water-mains. Two meetings were held.

CAPE MAY COUNTY.

Anglesea Borough.—MEMBERS AND OFFICERS—Ellsworth Hewitt, Adolph Anderson, James Chadwick, Wilbur E. Young; Geo. W. Dougherty, Secretary; H. H. Voorhees, Attorney, Wildwood.

Number of dwellings in borough, 80. Two complaints were investigated. Twenty meetings were held by the board.

Avalon Borough.—Rodney Van Gilder, Registrar.

No organized board of health. Public sewers were introduced in 1878.

Cape May City.—MEMBERS AND OFFICERS—Alonzo L. Leach, M.D.; Lafayette M. Hall, Albert B. Little, George L. Lovett, J. Stratton Ware; Lewis T. Stevens, Secretary; John W. Thompson, Registrar.

Holly Beach Borough.—MEMBERS AND OFFICERS—Elias Lee, John Bright, Henry Clark, Jesse D. Matthews; Lorenzo C. Johnson, Secretary; Robert Bright, Registrar; H. T. Douglass, Attorney.

Total number of dwellings, 200. One case of scarlet fever occurred. Total number of dwellings connected with public water-supply, 150. Number of complaints investigated, 140. Number of nuisances abated, 125. Eleven meetings were held.

Middle Township.—MEMBERS AND OFFICERS—V. N. Erricson, Dias Creek; Luther M. Swain, Swainton; Luther T. Garretson, Cape May C. H.; J. Morgan Dix, M. D., Cape May C. H.; Stillwell H. Townsend, Secretary, Cape May Court House; Morgan Hand, Attorney.

Four cases of scarlet fever were reported. Three meetings were held.

Ocean City.—MEMBERS AND OFFICERS—Dr. T. C. Hutchinson, Frank Dare, Dr. C. E. Edwards; Luther L. Wallace, Secretary; Frank B. Warner, Inspector.

CAPE MAY COUNTY—*Continued.*

Total number of dwellings, 850, of which number about 700 are connected with the public water-supply. Number of premises connected with sewers, 325. Ten complaints were investigated and 8 nuisances abated. Nine meetings were held.

Sea Isle City Borough.—MEMBERS AND OFFICERS—Alfred S. Steelman, Dr. N. Davis, Chas. H. Clouting, George Gardner; Henry A. DeRoche, Secretary; Matthew Jefferson, Attorney.

Number of dwellings connected with public water-supply, 242. Water connections made during the year, 26. Number of premises connected with sewers, 15. Number of nuisances abated, 8. Ten meetings were held.

South Cape May Borough.—No organized board of Health. James Ritchie, Jr., Mayor.

Upper Township.—MEMBERS AND OFFICERS—Anthony B. Smith, Beesley's Point; Belford E. Smith, Tuckahoe; Washington Van Gilder, Petersburg; Jesse T. Young, Secretary, Beesley's Point; Albert G. Corson, Registrar, Palermo; R. Marshall, M.D., Inspector, Tuckahoe.

Total number of dwellings, 344. One case of diphtheria occurred. Two meetings were held.

West Cape May Borough.—MEMBERS AND OFFICERS—Thomas H. Hughes, West Cape May; Samuel Taylor, West Cape May; Edward Phillips, West Cape May; John H. Hughes, West Cape May; A. G. Stevens, M.D., Secretary, West Cape May.

Five cases of typhoid fever occurred. Two complaints were investigated and one nuisance was abated. Three meetings were held.

Wildwood Borough.—MEMBERS AND OFFICERS—Dr. G. J. R. Miller, John N. Reeve, Jed. DuBois, Clarence G. Eldredge; Nelson S. Hays, Secretary; W. H. Washburn, Plumbing Inspector; Judge H. H. Voorhees, Attorney.

Total number of dwellings, 180. Number of dwellings connected with public water-supply, 161. Water connections during the past year, 32. Number of premises connected with sewers, 116. Sewer connections during the year, 31. Number of complaints investigated, 21. Number of nuisances abated, 19. Seven meetings were held.

CUMBERLAND COUNTY.

Bridgeton City.—MEMBERS AND OFFICERS—Ellsmore Stites, M.D.; Theodore G. Davis, M.D.; J. C. Applegate, M.D.; Jacob G. Streets, M.D.; William H. Ballenger; Isaac T. Nichols, Secretary; Chas. E. Bellows, Health Inspector; Jesse C. Davis, Plumbing Inspector.

The president of the board writes as follows:

Every member of the board can look back upon the time when our efforts were antagonized upon every side and when the people seemed to think that the whole object of the board of health was to annoy and embarrass, rather than to guard and protect. We all realize that there now exists a very different state of affairs; the people appeal to us for protection, and it is no uncommon thing for the inspector's office to be deluged with complaints. The manner in which people make their complaints and the promptness with which the nuisances are abated show conclusively that we have the respect and co-operation of the citizens of our city. In consequence of this co-operation many of our efforts have been crowned with success, and, as a matter of course, this board has been much encouraged, but there still exists many defects that we have not reached, and many obstacles we have not surmounted.

It has been my custom in my reports to refer to some of the most important local defects, and those that are amenable to correction. During my four years of service I find in looking up my reports that the list of objectionable conditions has been considerably lessened, but there are still left many important matters that should receive earnest consideration, chief among which are our defective scavenger system, gutter drainage and our inefficient system of isolating persons affected with one of the dangerous communicable diseases. Regarding our scavenger system, I had hoped to be able to report decided progress, but have been disappointed. The only suggestion I have now to make is that the city take it in hand the same as it has its water and fire departments, and establish an office and a corps of workmen. An estimate has been given for such an outfit as we would need in this city, including watertight wagons, pump, engines, &c., and it could be purchased for about \$1,000. This department would well pay its way, and at the same time make it possible for this board to enforce its ordinances. If council does not wish to assume the responsibility of a department, and would appropriate sufficient funds to equip us for the work, I have no doubt our health inspector would gladly superintend it, providing extra compensation was awarded him for his work. The matter of gutter drainage is another problem we have not yet solved. Owing to a defect in the law under which section 37 of our code is drawn we are at present somewhat handicapped, but its correction is not among the impossibilities, for we can make and enforce an ordinance forbidding such drainage at will. This question of gutter drainage forms a large percentage of the complaints brought to the notice of our inspector, and it seems to me that we, through our sanitary committee, might find some way of correcting this nuisance. Lastly, our inefficient system of domestic quarantine. We all know, after going through our last epidemic of measles, that our present system is well nigh useless. Tacking caution cards upon infected houses, and keeping the children from such houses out of school, but at the same time allowing the same children to roam at will upon the streets and mingle with whom they pleased, is to my mind absurd, and until we find some better system we

CUMBERLAND COUNTY—*Continued.*

shall continue to have widespread epidemics throughout our city. During the past year this board has done some excellent work. It has been the first working year of our new milk and meat ordinance, and while everything has not gone perfectly smooth and satisfactorily, yet much has been done to prevent the sale of adulterated milk and diseased meats within the city. Butchers are aiding detection of diseased meats and are condemning such and calling our attention to the same.

* * * * *

The medical officer of the board writes as follows:

During the latter part of last year (1900) scarlet fever prevailed to a considerable extent, with, however, but one death from the disease. Diphtheria was also present during this period, the type of the disease being in some of the cases quite severe. In both these diseases quarantine has been enforced as strictly and thoroughly as was possible. Thorough disinfection of infected houses has been insisted upon and it has been personally carried out by the health inspector of the board. The majority of the cases of scarlet fever were of a mild type, and in many cases there was an absence of characteristic symptoms, which made the diagnosis sometimes difficult. In the mild and doubtful cases it was often impossible to impress upon parents the necessity of quarantine measures. An interesting and extremely practical question, and one to which I invite attention, is whether there does exist a "fourth disease," as it has been termed, distinct on the one hand from measles, scarlatina and rotheln, exhibiting clinically several of the symptoms of these diseases, while at the same time it does not seem to confer immunity from an attack of any of them. Some of the cases prevailing during the past year would seem to support the view that there is such a disease. If there is it is highly important that it be distinguished from the common diseases above mentioned and assigned its proper place among the contagious and eruptive fevers. The prevalence of small-pox in some of the neighboring towns led the board several months ago to emphasize the necessity of a more general vaccination. While it received some attention it failed to arouse the interest it should, and it was not until a walking case of the disease appeared in the city that the people were in any degree aroused to the danger of infection. The case alluded to came to the city on the 24th of May and associated with a number of people before the nature of the disease was recognized. So far as possible to discover them, all persons who had been exposed were vaccinated and no new cases occurred. The apprehension excited led to a large number of vaccinations, but there are still many children and probably no inconsiderable number of adults who are still unvaccinated. The public welfare makes it imperative that some way should be found to reach these cases. It is extremely unfortunate and greatly to be regretted that many persons are under the influence of a total misapprehension with regard to the facts of vaccination, and with half knowledge have arrayed themselves against the practice of vaccination.

As regards the vaccination of children, the board of education has power to pass a resolution making vaccination a pre-requisite for admission to the public schools, and it is hoped that such action will be taken before the opening of the schools in September. Among other questions which receive the attention of the board is the disposal of the garbage of the city. The present method of disposing of it is inadequate and antiquated as well as extremely unsatisfactory. The suggestion which is

CUMBERLAND COUNTY—*Continued.*

made elsewhere, that the city council establish a street cleaning department, which shall also look after the collection of garbage, is one which has much to commend it.

Much good work has been accomplished by the inspection of meat and milk during the past year, and it is to be hoped that there will be no relaxation in the vigilance which has been exercised in this direction. Nothing should be left undone in securing pure food and water for our city.

The plumbing inspector reports that during the past year there were 67 plans of plumbing filed.

The health inspector reports as follows:

The improvements in the general sanitary condition of the city of Bridgeton during the past year are numerous and important, especially those resulting from the extension of the system of sewerage and the paving of the public streets in the center of the city, the street improvement having a marked effect in lessening dust and mud, with decided advantage to the public health and comfort. My department has not been confronted with any unusual or serious difficulties this year, and its work has been correspondingly light. Much has been done, however, in the line of attending to complaints of minor nuisances, most of them neglected cesspools and surface privies. Cesspools, although a necessary evil in the unsewered portions of the city, have no excuse for existence on the line of completed sewers and should be abandoned and filled up. Surface privies I include in the same class, and I strongly recommend that the board take such action during the coming year as will result in their total abandonment. We have not been compelled, during the year, to bring suit for any violation of the sanitary code or ordinances of the board. The work of our board would be vastly more efficient if we had improved methods of removing garbage and night soil, the work as it is now carried on being both crude and unsanitary. The garbage question continues to be a growing nuisance and subject of constant complaint. Scarlet fever has been the most prevalent disease of the year, 53 cases having been reported with only one death. They were mostly of a mild type, and at no one time did there seem to be any source to which to trace the contagion. A number of cases would spring up, almost at the same time, in different parts of the city. A careful investigation was made, but no clearly definable source of the contagion could be found. I am strongly of the opinion that more than one-half of them resulted from exposure to infection on school premises. A summary of my work, during the year, with contagious diseases is as follows:

Number of houses placarded for contagious diseases, 125, as follows:

Measles	52
Scarlet fever.....	53
Diphtheria.....	19
Membranous croup.....	1

Cases of typhoid fever reported, 32. This is an increase of 6 as compared with last year. One case was brought directly from Millville and taken to the city hospital and 13 other cases were traced to sources of infection outside of Bridgeton.

During the past year and in other years I have noticed, and it is clearly proven by

CUMBERLAND COUNTY—*Continued.*

our records, that scarlet fever, diphtheria and measles are more prevalent during the time that our schools are open. During the summer vacation our reports of contagious diseases decrease greatly. I am reliably informed that the floors of the school-rooms are not properly scrubbed, except once during the year, and then in the summer vacation. The floor of every school-room should be scrubbed at least once a week, with hot water and a solution of bichloride of mercury or some other good disinfecting liquid. The wardrobes in some of the schools, notably the second ward, are not large enough. They should be of sufficient size to allow the clothing of the scholars to be hung up separately. I have been impressed more deeply than ever with the absolute necessity of some systematic disinfection of our city schools. I find that in the majority of cases when contagious diseases are reported, the patient has attended school immediately before the outset of the disease and during its development. It is but fair to suppose that a child's hands, being soiled by discharges from the throat and nose, will in turn soil the benches, door-knobs, hand-rails, &c. and in this way infect a number of children before the original case is reported. There is absolutely no provision made against this condition of affairs at present, and consequently, before school has been convened many weeks almost every school-house in the city has become infected to a greater or lesser degree. A good disinfecting solution in the hands of a reliable janitor could easily disinfect the woodwork accessible to the children. The class-rooms are probably swept daily, but this is usually the full extent to which any cleaning is done. It is doubtful if the tops of the desks are ever cleaned beyond the dusting that follows sweeping.

The hand-rail on the stairs is seldom touched, except by the soiled hands of the children in passing up and down. The soiled hands of a child with an unrecognized diphtheretic throat come in contact with the top of the desk most of the school hours and in passing up and down stairs the hand is applied to the rail, and in this way germs may be deposited on these substances, to be brought in contact with the hands, of other children using desks and hand-rails. The daily sprinkling of the floor before sweeping, with a disinfecting solution, desk tops wiped off daily and the hand-rails treated in the same way, is a work that can be, and should be, done. The usual spring inspection of the entire city was made in May, resulting in the removal of large quantities of dirt, ashes and rubbish from yards and lanes, and it is a pleasure to report that citizens have been generally prompt to carry out any suggestion of the inspector for the improvement of sanitary conditions. There is certainly good reason for the belief that our labors for the public health have been better appreciated than ever before. A more thorough understanding of the importance of the public health exists on the part of our citizens generally and a better appreciation of the utility of the measures directed to that end. It is a pleasure for me to be able to report that the city of Bridgeton is at present cleaner and in a better sanitary condition than in previous years.

List of physicians reporting to the board :

Theodore G. Davis, 18 North Pearl street; George A. Harris, 303 North Laurel street; Jacob G. Streets, 188 East Commerce street; John R. C. Thompson, 236 East Commerce street; David R. Streets, 205 East Commerce street; Henry W. Elmer, 65 West Commerce street; Matthew K. Elmer, 3 Franklin street; J. C. Applegate,

CUMBERLAND COUNTY—*Continued.*

113 East Commerce street; D. H. Oliver, 183 North Pearl street; John H. Moore, 114 East Commerce street; T. J. Smith, 32 West Commerce street; Joseph Shepard, 36 East Commerce street; Joseph Tomlinson, 104 West Commerce street; Ellmore Stites, 122 East Commerce street; Alfred Cornwell, 311 North Laurel street; Stacy M. Wilson, 121 Bank street; E. L. Diamant, 118 East Commerce street; Reba Lloyd, 25 Bank street; S. D. Mayhew, 44 Atlantic street; E. S. Fogg, 29 East Commerce street; William F. Kirchhoff, 98 Atlantic street.

Deerfield Township.—MEMBERS AND OFFICERS—Elijah R. Parven, Deerfield street; Chauncey W. Kilborn, Rosenhayn; Wm. H. Vanlier, Jr., Deerfield street; Samuel M. Fox, Finoley Station; Dr. Chas. C. Phillips, Secretary, Deerfield street.

Eleven cases of diphtheria, 1 of membranous croup, 2 cases of scarlet fever and 1 case of typhoid fever were reported. Three meetings were held.

Downe Township.—MEMBERS AND OFFICERS—John W. Page, Newport; Charles T. Sheppard, Newport; James M. Bateman, Dividing Creek; John P. Joslin, Newport; Geo. E. Butcher, Secretary, Dividing Creek; Silas E. Robinson, M.D., Inspector, Newport; Samuel Iredell, Attorney, Bridgeton.

Number of dwellings, 388. Six cases of scarlet fever and 1 of typhoid fever were reported. One nuisance was abated. Four meetings were held.

Fairfield Township.—MEMBERS AND OFFICERS—Geo. B. Williams, E. C. Swing, Wm. H. C. Taylor; E. H. Whiticar, Secretary. All of Fairton.

Greenwich Township.—MEMBERS AND OFFICERS—William H. Glaspey, Greenwich; George S. Watson, Othello; Samuel W. Watson, Greenwich; Dr. S. M. Snyder, Greenwich; J. W. Butler, Secretary, Othello.

Total number of dwellings, 235. One meeting was held.

Hopewell Township.—MEMBERS AND OFFICERS—Chas. W. West, Shiloh; E. G. Ayars, Seeley; Edward D. Perry, Bridgeton; Walter L. Minch, Secretary, Shiloh.

Two cases of typhoid fever were reported. One meeting was held.

Landis Township.—MEMBERS AND OFFICERS—O. H. Adams, M.D., Vineland; Stephen Crane, Willow Grove; Wm. Hollworth, Vineland; Howard M. Dolbey, Secretary, Vineland; Geo. Nickerson, Inspector, Vineland.

Total number of dwellings estimated at 1,000. Communicable diseases were reported as follows: Diphtheria, 5; scarlet fever, 8;

CUMBERLAND COUNTY—*Continued.*

typhoid fever, 20. Three nuisances were abated. Two meetings were held.

Lawrence Township.—MEMBERS AND OFFICERS—E. L. Mulford, H. O. Newcomb, D. W. Sheppard; Henry S. Long, Secretary; Furman B. Sheppard, Registrar. All of Cedarville.

Maurice River Township.—MEMBERS AND OFFICERS—Chas. Grassman, Port Elizabeth; Chas. Champion, Dorchester; Horace P. Bickley, Delmont; Henry Reeves, Jr., Secretary, Leesburg; Dr. Joseph Butcher, Inspector, Heislerville; Martin W. Lane, Attorney, Millville.

Two meetings were held.

Millville City.—MEMBERS AND OFFICERS—Silas C. Smith, Edwin Conover, Richard B. Radcliffe, Wm. G. Champion; L. H. Hogate, Secretary; Frank Bullock, Inspector; John W. Wade, M.D., Inspector; Louis H. Miller, Attorney, Vineland.

Total number of dwellings, estimated to be 2,000. Two cases of diphtheria, 2 of scarlet fever and 2 of typhoid fever occurred. Six nuisances were abated. Six meetings were held.

Stow Creek Township.—MEMBERS AND OFFICERS—H. E. Hoffman, Shiloh; Chas. D. Fogg, Shiloh; Ephraim Mulford, Roadstown; Reuben A. Fogg, Secretary, Shiloh; Jas. R. Hoagland, Attorney, Bridgeton.

Total number of dwellings, 218. One case of small-pox occurred. Two meetings were held.

Vineland Borough.—MEMBERS AND OFFICERS—Robert Pond, Thomas Harkins, J. N. Tomlinson; J. H. Prince, Secretary; N. P. Marvel, Inspector; Chas. Senley, Inspector; L. H. Miller, Attorney.

Twenty-one cases of scarlet fever and 3 of typhoid fever occurred. A sewer system has been introduced during the past year, and up to the present time 90 premises have been connected with it. Ten nuisances were abated. Fourteen meetings were held.

ESSEX COUNTY.

Caldwell Borough.—MEMBERS AND OFFICERS—James Best, W. W. Wright, Isaac E. Baldwin, E. E. Peck, M.D.; Thos. W. Biggs, Secretary; John J. Van Orden, Registrar; Edward M. Jackson, Inspector; Thos. C. Provost, Attorney.

Total number of dwellings, 210. Two cases of diphtheria occurred during the year. Two complaints were investigated and one nuisance abated. Two meetings were held by the board. The secretary of the board writes as follows:

The condition of the general health is good, and we have had fewer complaints and less number of cases of disease reported this year than heretofore. Two cases of diphtheria reported and a number of cases of measles and whooping cough have occurred. There has been an unusual number of cases of malaria, but that seems to have been the experience of all the towns in this section this year.

Caldwell Township.—MEMBERS AND OFFICERS—E. E. Peck, M.D.; I. W. Debaun, Marcus S. Crane, Joel M. Harrison; Theodore Vincent, Secretary.

Total number of dwellings, 270. No meetings have been held by the board during the year. A complaint was received during the time of the sewage disposal beds at Essex Fells. Upon inquiry, it was ascertained that the complaint was due to the emptying of the cesspool, which contained solid matter, and not to the sewer-beds themselves. Some method should be adopted in future by which the emptying of the cesspool will be carried on without offense to those living in the vicinity.

Clinton Township.—MEMBERS AND OFFICERS—Wm. R. Ward, M.D., Lyons Farms; John J. Quinn, Park View; Jacob W. Fisher, Waverly Park; W. H. Goldsmith, Secretary, Lyons Farms; J. B. Ward, M.D., Inspector, Lyons Farms.

One case of scarlet fever was reported.

East Orange City.—MEMBERS AND OFFICERS—Eugene M. Brewster, Roger H. Butterworth, Chas. M. Matthews, Geo. M. Riley, Harvey Mott; T. N. Gray, Secretary; S. M. Long, City Clerk; Wm. T. Bowman, Inspector; Philemon Woodruff, Attorney.

Forty-five cases of diphtheria, 51 of scarlet fever and 25 of typhoid fever, were reported. Public sewers were introduced in 1887, and there are 3,884 premises connected with the system. Three hundred and forty new connections have been made during the past

ESSEX COUNTY—*Continued.*

year. One hundred and ninety complaints have been investigated and 65 nuisances were abated. Fourteen meetings were held.

Glen Ridge Borough.—MEMBERS AND OFFICERS—H. C. Harris, M.D.; E. E. Wright, F. C. Ostenhout, Chas. T. Howe; H. K. Benson, Secretary; Nathan Russell, Registrar.

Two cases of diphtheria, 2 of scarlet fever and 2 of typhoid fever were reported. Two nuisances were abated. One suit was brought for violation of plumbing code. Twelve meetings were held.

Town of Irvington.—MEMBERS AND OFFICERS—F. Ulrich, J. Woodruff, C. Bongas, Manhattan Park; A. Webb, F. Winkler; Edwin Berry, Secretary; Ira Meeker, Inspector.

Eight cases of diphtheria and 3 of scarlet fever occurred. Total number of dwellings connected with water-mains, 542. Water connections made during the year, 125. Thirteen complaints were investigated. Sixteen meetings were held.

Livingston Township.—MEMBERS AND OFFICERS—H. H. Hanen, Livingston; Wilbur H. DeCamp, Roseland; P. T. Collins, Livingston; David Flynn, Secretary, Livingston.

One nuisance was investigated. Four meetings were held.

Millburn Township.—MEMBERS AND OFFICERS—Charles O. Lyons, Short Hills; Chas. W. Cox, Millburn; Reuben G. Marsh, Millburn; W. Campbell, M.D., Short Hills; J. M. Drake, Secretary, Millburn; Abram S. Magee, Inspector, Millburn; Adrian Riker, Attorney, Newark.

Two cases of diphtheria and 9 of scarlet fever were reported. Nine meetings were held.

Montclair City.—MEMBERS AND OFFICERS—David D. Duncan, Moses N. Baker, Jas. S. Brown, M.D.; Raymond B. Smith, V.S.; Richard P. Francis, M.D.; Secretary; Marshall O. Leighton, Health Inspector; John O'Brien, Jr., Asst. Health Inspector; Edwin B. Goodell, Attorney.

Total number of dwellings, 2,764. Communicable diseases were reported as follows: Diphtheria, 50; scarlet fever, 16; typhoid fever, 22; small-pox, 6. Physicians promptly report all cases of communicable diseases. Total number of dwellings connected with public water-mains, 2,405. Dwellings connected with water-mains during the year, 121. Number of miles of public sewers, 30. Total num-



ISOLATION HOSPITAL BUILDINGS, NEWARK.

ESSEX COUNTY—*Continued.*

ber of premises connected with sewers, 1,400. Number of premises inspected during the year, 1,637. About 1,000 free vaccinations have been performed. Bi-monthly meetings are held.

Newark.—MEMBERS AND OFFICERS—Dr. H. C. H. Herold, President; M. Straus, J. A. Furman, M. T. Gay, Dr. C. M. Zeh, Dr. D. L. Wallace, Dr. F. W. Becker, Dr. W. S. Disbrow, H. Smith; David D. Chandler, Health Officer and Secretary.

EMPLOYES OF THE BOARD OF HEALTH—John J. Greene, Clerk Bureau Contagious Diseases; Eugene W. Bellar, Clerk Sanitary Division; Miss Marie Perier, Stenographer to Health Officer; Edward E. Worl, M.D., Superintendent Bureau Contagious Diseases; Herbert B. Baldwin, Chemist; George C. Sonn, Meteorologist. Bacteriological Division: Dr. R. N. Connolly, Bacteriologist; Dr. R. C. Ribbans, Assistant Bacteriologist; Ernst L. Skillman, Porter; Herman Volk, Culture Collector. City Dispensary: William A. Smith, Apothecary; Henry A. Oltman, Assistant Apothecary; William M. Gould, Dentist. District Physicians: William Schopfer, Herbert W. Long, William M. Goodwin, Matthew T. Gaffney, M. Louise Lefort, Welzmilller, Samuel H. Baldwin, Vincent Nager, William Gauch, Charles W. Titus, Hugh M. Hart, Fred Hagney. Sanitary Division—Meat Inspectors: Werner Runge, Charles Wolz. Plumbing Inspectors: John B. Sullivan, William H. Grier, Henry W. Schroeder. Sanitary Inspectors: Thomas E. Freeman, Louis H. Bridgem, William H. Young, Andrew J. Brady, John Wright, Thomas F. Newton, Morris Seidl, Ferman J. Reynolds, Otto B. Schalk, Charles E. Burke, Bernard Cahill, Herbert O'Rourke, Michael Helmstaedter, Richard J. Corbley, John F. Neary, Joseph A. Smith, Antonio Panzera. Milk Inspector: William H. Lyle. Disinfecting Corps: Samuel Knott, Chief; John L. Ball, William Parker, Hiram R. Stewart, Leonard Gillen; Frank Fetridge, Orderly at Isolation Hospital.

North Caldwell Borough.—No organized board of health. Fred L. Baldwin, Borough Clerk.

Orange City.—MEMBERS AND OFFICERS—John T. Platt, G. H. Richards, M.D.; A. Eichhorn, John Burke, P. J. Hannagan, J. H. Brown, S. Collins; William Schluer, Secretary; D. A. Dugan, Registrar; S. D. Philpot, Plumbing Inspector; R. Savage, Inspector; A. B. Seymour, Attorney.

Communicable diseases were reported as follows: Diphtheria, 65; scarlet fever, 24; typhoid fever, 20; varioloid, 3. Total number of premises connected with sewers, 2,840. Sewer connections during past year, 188. Complaints investigated, 278. Nuisances abated, 239. Twelve meetings were held. The secretary of the board reports as follows:

In our endeavors to prevent the spreading of contagious disease we worked on the same lines as in the year before. We insisted on and assisted in the isolation of patients so far as it could be made possible; we gave instructions, such as could be

ESSEX COUNTY—*Continued.*

given without interfering with the treatment of patients by the attending physician, in nursing and caring for the patients, to minimize the danger of additional cases, and we tried to find the source of infection. It is gratifying to report that the prompt action of the State Board of Health, on information received from this department, prevented, without doubt a serious outbreak of scarlet fever in this city.

Our experience with typhoid fever presents nothing new from last year. We had twenty cases. Nine were persons recently returned from summer resorts (in one family of six persons four were taken sick within a few days after arriving home). Polluted well-water was probably the cause of three cases. (The waters from two wells were examined. The result of the examination in one was doubtful; in the other the water was polluted. The owner of the first well was requested to abandon it and the second well was ordered closed.) The other eight cases appeared, one at a time, in different parts of the city, and nothing could be ascertained which would lead to the probable or possible cause.

The three cases of varioloid we had in March and April of this year were reported, with all the data relating to them. Our water supply is the same as before, and gives general satisfaction. In my last report I expressed the hope that at this time I would be able to report a garbage crematory in operation. In this we have been disappointed, and we are still urging and hoping. The establishment of an isolation hospital, by private contributions which had such an auspicious beginning, is all but dead. The many obstacles thrown in the way of such a praiseworthy enterprise have discouraged the people, and it now seems that the project is about to be abandoned.

Regarding nuisances, I beg to say that we are now vigorously forcing the abandonment of privy vaults and cesspools. We have already sent over 200 notices for that purpose. Our revised sanitary and plumbing code became effective on January 1st, 1901. Ordinances controlling the sale of milk and ice were passed and many old ordinances have been amended.

South Orange Township.—MEMBERS AND OFFICERS—J. H. Van Ness, Hilton; Richard Kernan, South Orange; Abel Mooney, South Orange; Thomas C. Baker, Secretary, Maplewood; W. W. Heberton, M.D., Inspector, South Orange.

One case of diphtheria, 2 of scarlet fever and 1 of typhoid fever were reported. Seven nuisances were abated. Four meetings were held.

South Orange Village.—MEMBERS AND OFFICERS—Mefford Runyon, M.D.; H. A. Pulsford, M.D.; Ira A. Kip, Jr.; Francis Speir, Jr.; Graham H. Brewer; Richard D. Freeman, M.D., Secretary; W. W. Heberton, M.D., Registrar.

Total number of dwellings, 770. Six cases of diphtheria, 5 of scarlet fever and 4 of typhoid fever were reported. Number of complaints investigated, 36. Number of nuisances abated, 26. Twelve meetings were held.

ESSEX COUNTY—*Continued.*

Vailsburg Borough.—MEMBERS AND OFFICERS—Edward Zusi, John F. Murphy, John V. Disfenthaler, Dr. Wm. F. Delmert; Robert A. Glover, Secretary; Wm. Billington, Registrar; Dr. Peter B. Davenport, Inspector; Herman Rodemacher, Inspector; Andrew Lautz, Inspector; R. W. Woodruff, Attorney, Newark.

Total number of dwellings, 240. Eight cases of diphtheria and 5 of scarlet fever occurred. Total number of dwellings connected with public water-supply, 196. Number of nuisances abated, 32. Two suits at law were undertaken where parties had violated the ordinance of the board. Sixteen meetings were held.

Town of West Orange.—MEMBERS AND OFFICERS—Joseph B. F. Grady, Joseph Fleming; Albert Wensch, Secretary; Benjamin Williams, Registrar; James M. Maghee, M.D., Inspector; Wm. R. Howe, Attorney.

Communicable diseases were reported as follows: Diphtheria, 28; scarlet fever, 5; typhoid fever, 5; small-pox, 1. Total number of dwellings connected with public water-supply, 575. Water connections during the year, 44. Number of sanitary inspections, 600. Number of nuisances abated, 56. One suit was brought for violation of ordinances. Twelve meetings were held.

GLOUCESTER COUNTY.

Clayton Borough.—MEMBERS AND OFFICERS—A. G. Silver, N. D. Brown, D. W. Moore, Jr.; Wm. M. Pierce, C. F. Fisler, M.D.

Deptford Township.—MEMBERS AND OFFICERS—A. W. Muller, Almonesson; Joseph Noblit, Wenonah; B. F. Haines, Westville; Wm. C. Cattell, Secretary, Wenonah; Dr. H. A. Stout, Inspector, Wenonah; Hon. D. D. Watkins, Attorney, Woodbury.

Number of dwellings, 500 (ap). Four cases of diphtheria, 2 of scarlet fever and 2 of typhoid fever were reported. Four meetings were held.

East Greenwich Township.—MEMBERS AND OFFICERS—John Heritage, Mickleton; Henry L. Haines, Clarksboro; Seth H. Warrington, Mickleton; Walter Heritage, Secretary, Mickleton; Dr. Chas. Haines, Inspector.

Two cases of diphtheria and 5 of scarlet fever were reported. Two meetings were held.

Franklin Township.—MEMBERS AND OFFICERS—Dr. A. M. Halsey, Williamstown; Samuel Louder, Newfield; H. Trimmell, Malaga; A. B. Richman, Malaga; W. S. Richman, Secretary, Malaga; Dr. A. A. Smith, Inspector.

GLOUCESTER COUNTY—*Continued.*

Total number of dwellings, 159. Four cases of scarlet fever were reported. Three meetings were held.

Glassboro Township.—MEMBERS AND OFFICERS—Dr. C. S. Heritage, Glassboro; Simon Duffield, Glassboro; Josiah Shute, Pitman Grove; David Paulin, Secretary, Glassboro; Edward Munyun, Inspector, Glassboro; John S. Jessup, Attorney, Woodbury.

Total number of dwellings, 600. Six cases of diphtheria, 11 of scarlet fever, 2 of typhoid fever and 1 of small-pox were reported. Number of dwellings connected with public water-supply, 107, of which 12 were made last year. Number of nuisances abated, 40. Seven meetings were held.

Harrison Township.—MEMBERS AND OFFICERS—Samuel Stratton, Ewan; Nathan S. Lloyd, Mullica Hill; Albert Murphy, Richwood; S. F. Ashcroft, M.D., Mullica Hill; Eli Heritage, Secretary, Richwood.

Two meetings were held.

Logan Township.—MEMBERS AND OFFICERS—C. Fletcher Myers, Bridgeport; John D. Norton, Bridgeport; E. T. Oliphant, M.D., Bridgeport; Isaac Derrickson, Repaupo; S. B. Platt, Secretary, Bridgeport; Samuel H. Richards, Attorney, Bridgeport.

Total number of dwellings, 340. Sixteen cases of scarlet fever and 2 of typhoid fever were reported. Eight meetings were held.

Mantua Township.—MEMBERS AND OFFICERS—Robert G. Kincaid, Pitman; Harry Mullin, Mantua; George Morey, Barnsboro; George B. Hurff, Secretary, Sewell; L. N. Slaughter, M.D., Inspector, Pitman; A. H. Swackhamer, Attorney, Woodbury.

Two cases of diphtheria, 2 of scarlet fever and 4 of typhoid fever were reported. Three nuisances were abated. Four meetings were held.

Monroe Township.—MEMBERS AND OFFICERS—J. Gauntt Edwards, M.D.; James M. Levered, M. M. Chew, H. B. Garwood; Clayton B. Tice, Secretary; all of Williamstown; D. O. Watkins, Attorney, Woodbury.

Total number of dwellings, 550. Four cases of small-pox occurred. Three complaints were investigated. Two nuisances were abated. Eight meetings were held.

GLOUCESTER COUNTY—*Continued.*

South Harrison Township.—MEMBERS AND OFFICERS—Frank Kirby, Alfred Lippincott, George Conover; Samuel F. Stanger, Secretary. All of Harrisonville.

One case of diphtheria occurred. One meeting was held.

Washington Township.—MEMBERS AND OFFICERS—C. H. Doran, Hurffville; John E. Williams, Turnersville; Allen Hurff, Cross Keys; Cyrus B. Phillips, M.D., Hurffville; C. D. Nicholson, Secretary, Turnersville; Joseph Sumerill, Attorney, Woodbury.

One nuisance was reported. Two meetings were held.

Wenonah Borough.—MEMBERS AND OFFICERS—Harry A. Stout, M.D.; Chas. Lorence, M.D.; Wm. J. Dawson; Jesse W. English, Secretary; J. K. Schultz, Inspector; D. O. Watkins, Attorney.

Total number of dwellings, 78. One nuisance was abated. Three meetings were held.

West Deptford Township.—MEMBERS AND OFFICERS—Joseph A. Moore, Woodbury; R. M. Plum, Westville; Elmer E. Clement, Thorofare; James Hunter, M.D., Westville; James Carter, Secretary, Thorofare; D. O. Watkins, Attorney, Woodbury.

Six cases of diphtheria, 1 of scarlet fever and 1 of typhoid fever occurred. Seventy dwellings are connected with the public water-supply. One nuisance was abated. Three meetings were held.

Woodbury City.—MEMBERS AND OFFICERS—Wm. M. Carter, Warner Underwood, W. F. Williams, T. E. Parker, M.D., J. Boyd Avis; Arthur Starr, Secretary; Charles Walton; Joshua Dawson, Inspector; Lewis Starr, Attorney.

Total number of dwellings, 800. Communicable diseases were reported as follows: Diphtheria, 28; scarlet fever, 3; typhoid fever, 3; small-pox, 5. Total number of dwellings connected with public water-supply, 750. Recent water connections, 12. A complete sewer system for the city is being introduced. Number of nuisances abated, 20. Thirty-six meetings were held.

HUDSON COUNTY.

Hudson County.—MEMBERS AND OFFICERS—John E. West, Dr. John Connell, Dr. C. B. Converse; C. J. Rooney, Clerk; Michael Nevin, Inspector; John F. Nagle, Inspector; Dr. C. C. Hendrick, Medical Inspector; John J. Mulvaney, Counsel. All of Jersey City.

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HUDSON COUNTY—*Continued.*

Communicable diseases were reported as follows : Diphtheria, 748 ; scarlet fever, 810 ; typhoid fever, 76 ; small-pox, 82 ; measles, 406. Twenty-four meetings were held.

Town of Harrison.—MEMBERS AND OFFICERS—Bernard A. Daly, John T. Malone, Patrick Cooney, Nathaniel Comey ; John J. Scannell, Secretary ; John T. McClure, Inspector ; Michael T. Barrett, Attorney,

Total number of dwellings, 1,465. Communicable diseases were reported as follows : Diphtheria, 21 ; scarlet fever, 11 ; typhoid fever, 11 ; small-pox, 32 ; varioloid, 6. Total number of dwellings connected with public water-supply, 998, of which 66 were made during the past year. Total number of premises connected with sewers, 766, of which 84 were connected during the year. Total yearly cost for garbage collection and removal, \$1,400. Number of complaints investigated, 392. Number of nuisances abated, 380. Fourteen meetings were held.

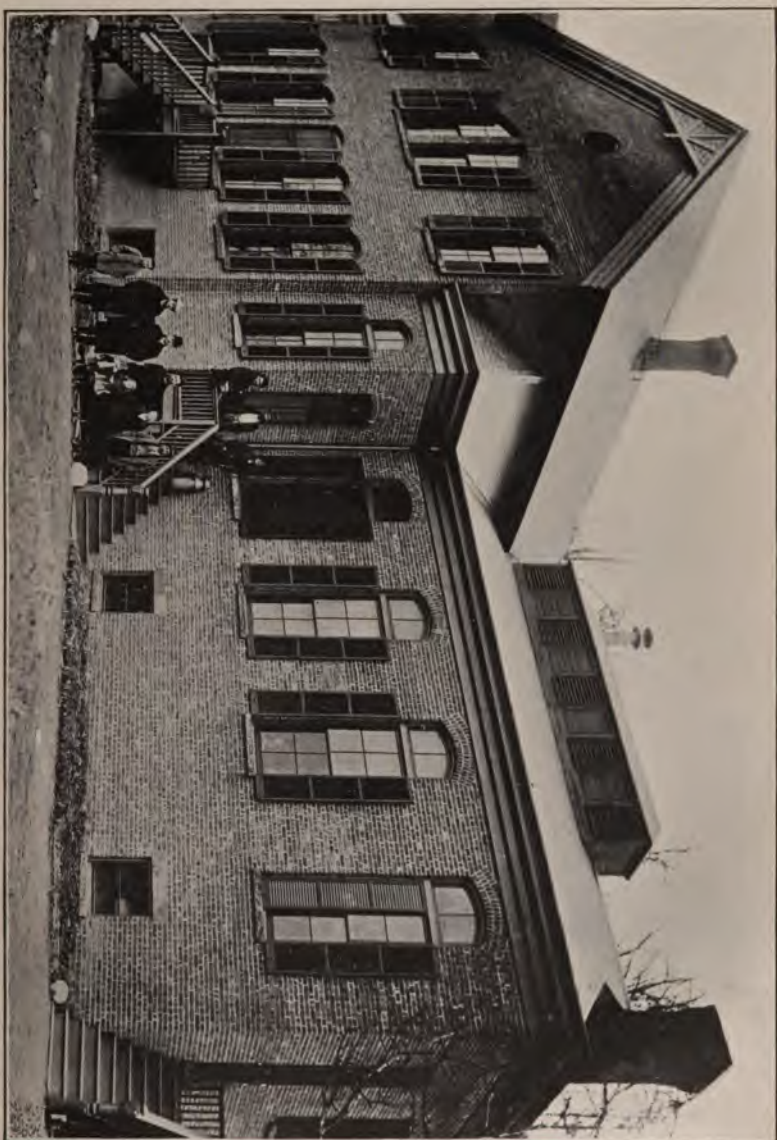
Hoboken City.—MEMBERS AND OFFICERS—Dr. Samuel A. Helfer, Millard F. Jackson, John Podesta, G. M. Sinclair, Dr. E. T. Steadman ; James Havron, Secretary ; Antonio Granelli, Inspector ; John Beronio, Inspector ; E. A. S. Lewis, Attorney.

Total number of dwellings, 5,000. Number of tenement-houses, 784. Communicable diseases were reported as follows : Diphtheria, 133 ; scarlet fever, 277 ; typhoid fever, 15 ; small-pox, 8. Total number of dwellings connected with public water-supply, 4,700, of which number 77 were made during the year. Number of complaints investigated, 2,073. Nuisances abated, 2,067. Eighteen meetings were held.

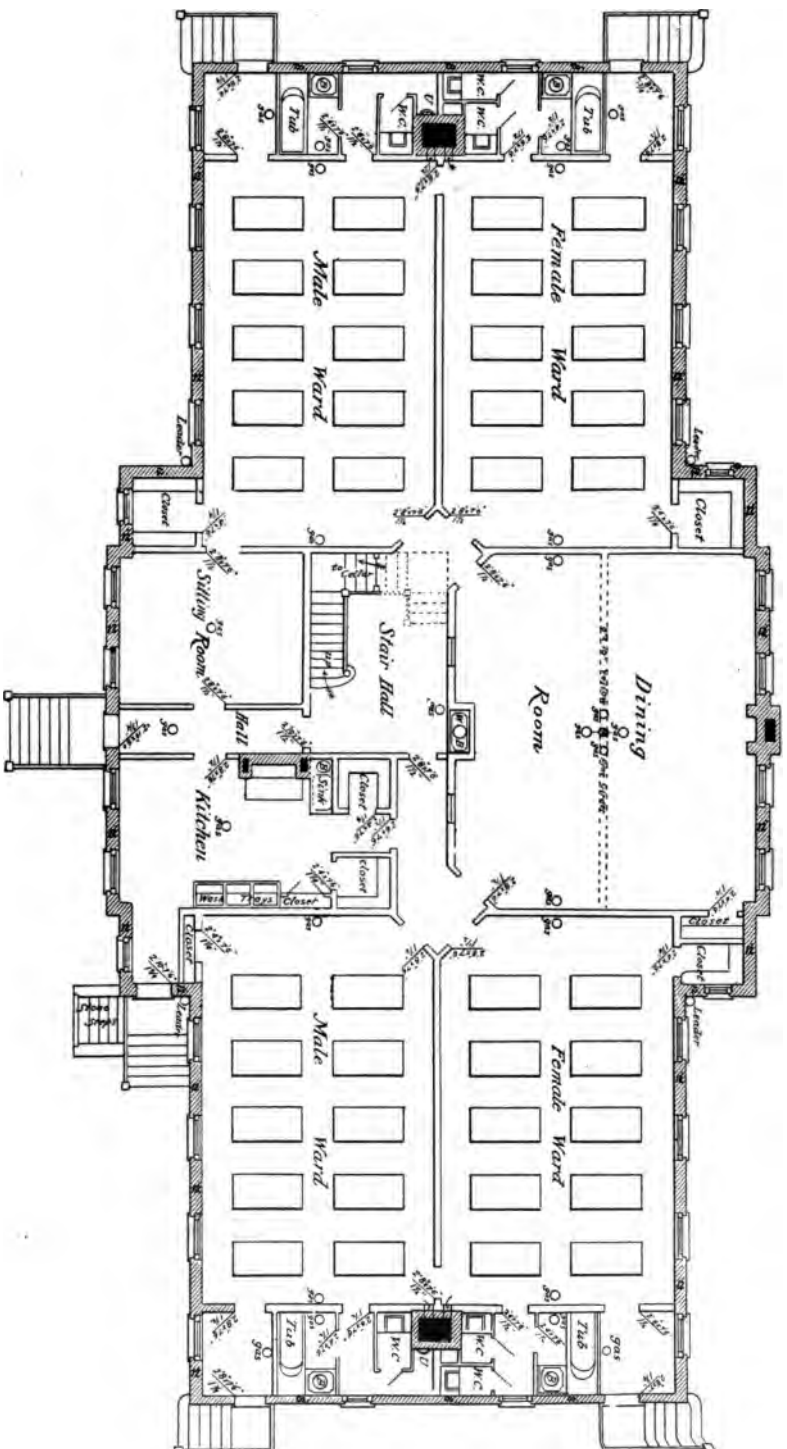
Town of Kearny.—MEMBERS AND OFFICERS—Harvey C. Pierce, Arlington ; C. W. Bouroughs, Arlington ; B. Burtis, Kearny ; Peter Boyle, Kearny ; John Davison, Jr., Kearny ; W. W. Keyler, Secretary, Kearny ; Albert E. Geissler, Inspector, Kearny ; Geo. F. Lightfoot, M D., Health Officer, Arlington

Communicable diseases were reported as follows : Diphtheria, 14 ; scarlet fever, 19. Number of complaints investigated, 198. Number of nuisances abated, 40. Monthly meetings are held.

North Bergen Township.—MEMBERS AND OFFICERS—Chas. Dietz, West Hoboken ; Patrick A. Brady, Hudson Heights ; John B. Branagan, New Durham ;



HUDSON COUNTY ISOLATION HOSPITAL.



First Story
 PLAN OF HUDSON COUNTY ISOLATION HOSPITAL.

HUDSON COUNTY—*Continued.*

John W. Culver, M.D., Jersey City; Emil J. Foersch, Secretary, New Durham; Joseph Kennell, Inspector, New Durham; J. Emil Walscheid, Attorney, Weehawken.

Twenty-nine cases of diphtheria and 18 of scarlet fever were reported. Two slaughter-houses, for slaughtering horses, were closed. Thirty-five nuisances were abated. Sixty meetings were held.

Town of West New York.—MEMBERS AND OFFICERS—J. Clement Justin, John Oetjen, John D. Rover, John Hangley; Wm. Meckbeck, Secretary; Augustus A. Rich, Attorney.

Communicable diseases were reported as follows: Diphtheria, 11; scarlet fever, 8; typhoid fever, 6; small-pox, 1. Number of complaints investigated, 15. Number of nuisances abated, 12. Twenty-four meetings were held.

HUNTERDON COUNTY.

Alexandria Township.—MEMBERS AND OFFICERS—Daniel M. Case, Pittstown; Stewart Opdyke, Little York; Robert M. Roseberry, Secretary, Little York; D. M. Carpenter, Inspector, Little York; Paul Queen, Attorney, Flemington.

Communicable diseases were reported as follows: Diphtheria, 1; typhoid fever, 1. Communicable diseases are promptly reported by physicians to the secretary and are duly recorded in a book, in accordance with the requirements of the law. One meeting was held.

Bethlehem Township.—MEMBERS AND OFFICERS—John Johnson, Norton; J. V. Williver, Bloomsbury; William Creveling, Pattenburg; Samuel O. Myers, Secretary, Bloomsbury; Dr. E. L. Riegler, Inspector, Bloomsbury; William C. Gebhart, Attorney, Clinton.

Total number of dwellings, about 500. Cases of communicable diseases are not reported. One death from diphtheria occurred. Complaints investigated during the year, 3. Nuisances abated, 3. The board held four meetings.

Clinton Borough.—MEMBERS AND OFFICERS—F. A. Esty, Jr.; W. H. Baker, M. D. Knight, M.D.; E. C. Moke, Secretary; John Hawk, Inspector.

Number of dwellings, 250. One case of diphtheria was reported. Five meetings were held.

HUNTERDON COUNTY—*Continued.*

Clinton Township.—MEMBERS AND OFFICERS—Willard E. Berkaw, Annandale; George F. Case, Lebanon; Geo. M. Rinehart, Cokesburg; Thomas Connelly, Annandale; Bergen B. Berkaw, Secretary, Annandale; Johnson V. Aller, Attorney, Clinton.

Number of dwellings, 600 (ap.) Three nuisances were abated. Four meetings were held.

Delaware Township.—MEMBERS AND OFFICERS—Clark B. Johnson, Rosemont; Samuel F. Fauss, Sand Brook; Hiram D. Hoppock, Sergeantsville; Frank W. Venable, Sergeantsville; George N. Best, M.D., Rosemont; Adam O. Robbins, Attorney, Flemington.

Number of dwellings, 490. Six cases of diphtheria and 4 of typhoid fever were reported. Two meetings were held.

Franklin Township.—MEMBERS AND OFFICERS—W. D. C. Robinson, Pittstown; Hiram D. Lowney, Quakertown; John E. Anderson, Pittstown; J. L. Agans, Secretary, Pittstown; Q. E. Snyder, M.D., Inspector, Quakertown.

One case of typhoid fever occurred. Two meetings were held.

High Bridge Borough.—MEMBERS AND OFFICERS—P. H. Murray, Percival Chrystie, John Phillips; Samuel Tate, Secretary; C. F. Halsted, Registrar; Daniel H. Beekman, Attorney, Somerville.

Total number of dwellings, 150. Number of tenement-houses, 12. Seven cases of diphtheria and 2 of typhoid fever were reported. Total number of dwellings connected with public water-mains, 50, of which 15 were connected during the year. Six nuisances were abated. Fifteen meetings were held.

Holland Township.—MEMBERS AND OFFICERS—Walter Burgstresser, Holland; John W. Shafer, Milford; Forman Bellis, Finesville; Godfrey Hawk, Secretary, Bloombury.

Junction Borough.—No organized board of health. Edgar E. Riddle, Registrar.

Three cases of diphtheria occurred.

Kingwood Township.—MEMBERS AND OFFICERS—Newton Search, Baptisttown; John Hoff, Baptisttown; Thomas MacLoan, Pt. Pleasant, Pa.; Samuel Snyder, Secretary, Locktown; F. S. Grim, M.D., Inspector, Baptisttown.

Three cases of diphtheria occurred. One nuisance was abated. Three meetings were held.

HUNTERDON COUNTY—*Continued.*

Lambertville City.—MEMBERS AND OFFICERS—John L. Coryell, A. D. Anderson, Theodore Barber, Wm. R. Bowne, Wm. A. Cole, Frank W. Larison, M.D.; James H. Reynolds, Secretary; L. H. Sergeant, Attorney.

Total number of dwellings, 1,240. Three cases of diphtheria and 1 of typhoid fever were reported. Number of dwellings connected with public water-supply, 286. Cost of garbage collection and removal, \$549. Nuisances abated, 10. Fourteen meetings were held.

Lebanon Township.—MEMBERS AND OFFICERS—George F. Hoffman, High Bridge; Wm. H. Anderson, Califon; Wm. V. Prall, Changewater; A. S. Banghart, Secretary, Glen Gardner; F. B. Fulper, M.D., Inspector.

Total number of dwellings, 850. Two cases of diphtheria occurred. Two nuisances were abated. Four meetings were held.

Readington Township.—MEMBERS AND OFFICERS—D. H. Miller, White House; George W. Sheets, Pleasant Run; Frank A. Cole, Pleasant Run; David Schomp, Secretary, Pleasant Run; F. L. Johnson, M.D., Inspector, Stanton.

Four cases of scarlet fever and 3 of typhoid fever were reported. One nuisance was abated. Three meetings were held.

Stockton Borough.—MEMBERS AND OFFICERS—Henry P. Cullen, Wm. V. Reed, John B. Winters, Harry F. Hoff; John S. Wilson, Secretary.

Total number of dwellings, 115. One nuisance was abated.

Tewksbury Township.—MEMBERS AND OFFICERS—Jeremiah Teats, Mountville; Elias Conover, Fairmount; Henry Craig, New Germantown; H. S. Potter, Secretary, Pottersville; Theo. Miller, M.D., Inspector, Califon.

Two cases of scarlet fever occurred. Two meetings were held.

Union Township.—MEMBERS AND OFFICERS—Sylvester Taylor, Pittstown; Jonas Tharp, Pattenburg; Godfrey R. Emery, Jutland; John Little, Secretary; Jutland; Edgar Allen, M.D.; Inspector; Pattenburg; P. A. Queen, Attorney; Flemington.

Two meetings were held.

MERCER COUNTY.

East Windsor Township.—MEMBERS AND OFFICERS—Levi Updike, Hightstown; E. R. Pickering, Hightstown; Aaron Ely, Hightstown; S. L. Mount, Registrar, Etra; A. V. Dawes, Attorney, Hightstown.

Total number of dwellings, 164. One nuisance was abated. No meetings were held.

Ewing Township.—MEMBERS AND OFFICERS—Lewis E. Anderson, Ewingville; James F. Herbert, Trenton Junction; Samuel S. De Cou, Trenton Junction; Edgar Hart, M.D.; Pennington; J. M. Mathews, Secretary, Box 676, Trenton.

One nuisance was abated. An injunction was secured preventing the dumping of garbage from the city of Trenton in the township. Four meetings were held.

Hamilton Township.—MEMBERS AND OFFICERS—George R. Robbins, M.D., Hamilton Square; A. T. Tilton, Trenton; George C. Cubberly, Hamilton Square; Wm. E. Ford, Crosswicks; Azariah Cubberly, Secretary, Hamilton Square; R. Ellsworth Haines, Registrar, Hamilton Square.

One case of diphtheria occurred. Five nuisances were abated. Two suits were instituted to prevent the dumping of night soil within the township limits.

Hopewell Borough.—MEMBERS AND OFFICERS—Dr. T. A. Pierson, D. L. Blackwell, S. V. Van Zandt, Dr. G. E. Fetter; W. I. Phillips, Secretary; E. V. Savage, Inspector; J. S. Van Dike, Attorney, Trenton.

Total number of dwellings, 180. Two cases of diphtheria and 1 of typhoid fever were reported. Total number of dwellings connected with water-mains, 30. Five complaints were investigated and 4 nuisances abated. Eight meetings were held.

Hopewell Township.—MEMBERS AND OFFICERS—John Fleming, Pennington; Pierson B. Hunt, Titusville; David Stout, Hopewell; Arthur T. Blackwell, Secretary, Harborton; Wm. Radcliffe, M.D., Inspector, Pennington; Robert Durling, Attorney, Pennington.

Thirteen cases of diphtheria occurred. One nuisance was abated. Seventeen meetings were held.

Lawrence Township.—MEMBERS AND OFFICERS—James Phillips, Slackwood; Clark Flock, Lawrence Station; John D. Cranstown, Lawrenceville; Edmund Dewitt, M.D., Lawrenceville; Frank Pierson, Secretary, Lawrenceville; John Sykes, Attorney, Trenton.

MERCER COUNTY—Continued.

Four nuisances were abated. Ten meetings were held.

Pennington Borough.—MEMBERS AND OFFICERS—T. D. Durling, James R. Bergen, Oliver B. Gray, Archibald Updike, Samuel H. Chatten, Nelson M. Lewis; J. C. Bunn, Secretary; Edgar Hart, M.D., Inspector; T. D. Durling, Attorney.

Total number of dwellings, 135. One case of varioloid was reported. Sixty dwellings are connected with the public water-supply. One nuisance was abated. One meeting was held.

Princeton Township.—MEMBERS AND OFFICERS—Dr. E. H. Bergen, B. L. Gulick, R. M. Terhune, M. Pyne; H. W. Van Dyke, Secretary. All of Princeton.

Nuisances abated, 5. Six meetings were held.

Trenton City.—MEMBERS AND OFFICERS—Hon. G. D. W. Vroom, Wm. McD. Struble, M.D.; Adam Exton, Charles P. Britton, M.D.; Col. Thos. S. Chambers; William Cloke, Secretary; Wm. H. Milburn, Treasurer; Alton S. Fell, M.D., Health Officer; Wm. C. Allen, Assistant Health Officer; Edward L. Titus, Assistant Health Officer; George W. Feaster, Plumbing Inspector; Jacob W. Coward, Attorney.

Communicable diseases were reported as follows: Diphtheria, 93; scarlet fever, 31; typhoid fever, 71. An isolation hospital for cases of infectious diseases is located in Hamilton township. Total number of dwellings connected with water-supply, 12,000. Total number of premises connected with sewers, 3,300. A plant for the destruction of garbage has been introduced and an average of 20 tons a day is destroyed. Number of complaints investigated, 1,047. Number of nuisances abated, 813. Ten meetings were held.

Washington Township.—MEMBERS AND OFFICERS—Forman Hutchinson, Windsor; Chas. Hulce, Allentown; Jonathan H. Dye, Windsor; E. K. Coles, Secretary, Windsor.

One meeting was held.

West Windsor Township.—MEMBERS AND OFFICERS—J. R. Wyckoff, Princeton Junction; David D. Bergen, Princeton Junction; Hiram Mount, Edenburg; C. H. Mather, Secretary, Lawrence Station.

MIDDLESEX COUNTY.

Cranbury Township.—MEMBERS AND OFFICERS—John Britton, Plainsboro; David J. Wilson, Plainsboro; E. W. Clayton, Prospect Plains; A. M. Davison, Secretary, Cranbury.

One case of scarlet fever was reported. One meeting was held.

Madison Township.—MEMBERS AND OFFICERS—Cornelius Berlew, Browntown; Ambrose Greene, Old Bridge; James Fountain, Old Bridge; D. H. Brown, Secretary, Browntown; Edward Barker, Inspector, Cliffwood.

Sixteen cases of scarlet fever were reported.

Metuchen Borough.—MEMBERS AND OFFICERS—E. B. Dana, M.D.; John Lehlein, A. C. Kelly; A. C. Ayres, Secretary; C. M. Tausig, Inspector; George Silzer, Attorney.

Three cases of typhoid fever were reported. Dwellings connected with public water-supply, 200. Number connected during the year, 50. Five complaints were investigated and 2 nuisances abated. Ten meetings were held.

Milltown Borough.—No organized board of health. F. E. Riva, M.D., Inspector.

Monroe Township.—MEMBERS AND OFFICERS—C. A. Morse, Prospect Plains; Samuel F. Butcher, Applegarth; Willard Forman, Jamesburg; J. L. Suydam, M.D., Jamesburg; R. R. Vandenberg, Secretary, Prospect Plains.

One meeting was held.

New Brunswick City.—MEMBERS AND OFFICERS—Henry R. Baldwin, M.D.; H. D. Cook, M.D.; Prof. John B. Smith, F. B. Kilmer; S. V. D. Clark, M.D., Secretary; George H. Denzer, Registrar; Conrad Sebolt, Inspector; Willard P. Clark, Inspector; H. B. Willis, Attorney.

Communicable diseases were reported as follows: Diphtheria, 6; scarlet fever, 14; typhoid fever, 17. Total number of dwellings connected with public water-supply, 3,215. Water connections made during the year, 1,100. There are 13 miles of public sewers. Sewage is discharged into the Raritan river. Number of complaints investigated, 101. Nuisances abated, 100. Ten meetings were held.

MIDDLESEX COUNTY—*Continued.*

North Brunswick Township.—MEMBERS AND OFFICERS—Thos. H. Buckalew, New Brunswick, R. F. D., No. 4; Samuel Van Anglen, New Brunswick, R. F. D., No. 5; Peter R. Van Sickle, New Brunswick, R. F. D., No. 5; Alonzo E. Bowman, Secretary, New Brunswick, R. F. D., No. 4; J. D. Ten Eyck, M.D., Inspector, Franklin Park; Irving Hoagland, Attorney, New Brunswick.

One nuisance was abated. One meeting was held.

Piscataway Township.—MEMBERS AND OFFICERS—Thomas Branningham, South Plainfield; B. Dewitt Giles, New Market; Nelson M. Giles, Bound Brook; M. J. Whitford, M.D., New Market; Chas. E. Kelly, Secretary, New Market; Henry C. Suydam, Attorney, Plainfield.

Four cases of diphtheria occurred. Four nuisances were abated. Seven meetings were held.

Raritan Township.—MEMBERS AND OFFICERS—Peter Lott, Metuchen; Edward Pfeiffer, Fords; Alfred Mundy, Metuchen; Wm. T. Woerner, Secretary, New Brunswick; W. V. McKenzie, M.D., Inspector, Metuchen; W. A. Spencer, Attorney, Perth Amboy.

One nuisance was abated. Two meetings were held.

Sayreville Township.—MEMBERS AND OFFICERS—August Rhodes, J. M. Blew, Henry Arleth, J. H. Beekman M.D.; B. F. Samsel, Secretary; Chas. Englehart, Inspector; all of Sayreville; Warren R. Schenck, Attorney, New Brunswick.

Five cases of diphtheria and 1 of typhoid fever were reported. Four nuisances were abated. Four meetings were held.

South Amboy Borough.—MEMBERS AND OFFICERS—J. Leon White, M.D.; Bernard Roddy, John I. Taylor, John J. McIlhinney; Joseph F. Fulton, Secretary; Thos. Baker, Inspector.

One case of scarlet fever, 1 of typhoid fever and 6 of small-pox were reported. Twenty meetings were held.

South River Borough.—MEMBERS AND OFFICERS—Wm. H. Peterson, George Allgair, John H. Lott, J. C. Bowne; R. Van Dyke Reid, Secretary; A. L. Woods, M.D., Inspector.

Total number of dwellings, 497. Nine cases of scarlet fever, 2 of typhoid fever and 2 of small-pox were reported. Number of nuisances abated, 47. Five meetings were held.

MONMOUTH COUNTY.

Asbury Park.—MEMBERS AND OFFICERS—Nelson E. Buchanon, President; David W. Sexton, Jesse Minot, Theodore H. Beringer, James A. Bradley, Alonzo R. Parsons; Randolph Rose, Treasurer; David C. Bowen, Secretary; Budd H. Obert, Inspector; Samuel A. Patterson, Attorney.

The secretary writes as follows:

There have been fifty-eight deaths during the year—thirty-seven among the resident and twenty-one among the non-resident population. Thirty causes of death were named, the largest number due to any one cause being seven from tuberculosis. Pneumonia caused three; influenza, three; scarlet fever, two; pertussis, three; dysentery, two. The death rate among the resident population was 8.76 per 1,000 inhabitants.

TABLE SHOWING NUMBER OF DEATHS OCCURRING IN ASBURY PARK AMONG RESIDENT AND NON-RESIDENT POPULATION EACH YEAR, 1881 EXCEPTED, FOR THE PAST TWENTY-TWO YEARS.

YEARS.	Resident population.*	DEATHS.			Resident death-rate per 1,000 population.
		Resident.	Non-resident.	Total.	
1880	1,640	19	13	32	11.58
1882.....	1,784	30	18	48	16.81
1883.....	1,856	18	12	30	9.69
1884.....	1,928	24	15	39	12.44
1885.....	2,000	20	14	34	10.00
1886.....	2,125	21	23	34	9.88
1887.....	2,250	20	29	49	8.88
1888.....	2,375	16	18	34	6.73
1889.....	2,500	28	28	56	11.20
1890.....	2,625	32	39	71	12.19
1891.....	2,750	34	28	62	13.36
1892.....	2,875	35	24	59	12.17
1893.....	3,000	30	19	49	10.00
1894.....	3,380	40	21	61	11.86
1895.....	3,761	39	17	56	10.36
1896.....	3,838	34	25	59	8.85
1897.....	3,916	43	19	62	10.98
1898.....	3,993	28	13	41	7.01
1899.....	4,071	37	22	59	9.08
1900.....	4,148	36	22	58	8.67
1901.....	4,225	37	21	58	8.76

*Resident population estimated, except for the years 1880, 1895 and 1900.

MONMOUTH COUNTY—*Continued.*

TABLE SHOWING AGES AT DEATH FOR YEAR ENDING OCTOBER 1st, 1901.

	Males.	Females.	Total.
Under 1 year.....	2	3	5
1 to 2 years.....	3	.....	3
2 " 5 ".....	2	.....	2
5 " 10 ".....	2	.....	2
10 " 20 ".....	1	2	3
20 " 30 ".....	2	5	7
30 " 40 ".....	1	.....	1
40 " 50 ".....	4	1	5
50 " 60 ".....	4	1	5
60 " 70 ".....	1	2	3
70 " 80 ".....	6	8	14
80 " 90 ".....	2	6	8
Totals.....	30	28	58

There have been fifty-four marriages and twenty-six births reported during the past year. The number of reported marriages and births in Asbury Park have not increased during the past years in keeping with the increase in population, but the number of births reported have decreased with the increase in population, as will be shown by the following table:

TABLE SHOWING MARRIAGES, BIRTHS AND STILL-BIRTHS FOR PAST TWELVE YEARS.

YEARS.	Popula- tion.*	Mar- riages.	Births.	Still- births.
1890.....	2,625	65	32	.....
1891.....	2,750	45	49	1
1892.....	2,875	48	46	2
1893.....	3,000	50	55	1
1894.....	3,380	47	45	1
1895.....	3,761	61	51	3
1896.....	3,838	44	37	1
1897.....	3,916	82	51	2
1898.....	3,993	45	46	1
1899.....	4,071	55	39	1
1900.....	4,148	45	32	2
1901.....	4,225	54	26	2
Totals		641	509	17

Forty cases of communicable diseases have been reported during the year, as follows: Scarlet fever, twenty-nine; typhoid fever, two; diphtheria, two; varioloid, one; measles, six. An outbreak of scarlet fever occurred early in March and ex-

* Estimated except for census years.

MONMOUTH COUNTY—*Continued.*

tended over a period of about four months, during which time there were twenty-nine cases reported, two of which resulted fatally. The first case occurred in the family of a Polish Jew, who resided in a tenement-house and conducted a merchant tailoring business in the dwelling apartments. Facts which were subsequently gathered, relating to the source of infection in this case, show that relatives of this family, residing in an adjoining sanitary district, had, for several weeks past, been suffering from scarlet fever, and that at least one member of the family had been visiting back and forth. Owing to the unsuitable arrangements on the premises for establishing isolation for this case, it was decided to remove the patient to the isolation hospital, on Asbury avenue. This purpose was defeated, however, by the Neptune Township Committee, in whose sanitary district the building is located, refusing to permit the further use of this building for isolation hospital purposes. While this action, on the part of the committee, was not wholly unlooked for, it, nevertheless, left this board without an available building for isolation hospital purposes, the need of which was forcibly demonstrated on several occasions during the epidemic which followed. Had the buildings which the city contemplates erecting on the land recently donated for this purpose by Mr. James A. Bradley been available at this time, their use would have solved several troublesome problems which arose, and would have facilitated the work of the board in controlling the spread of the disease. The cases were distributed among nineteen dwellings, and in one case only was there any evidence obtained showing that the disease was directly transmitted from an infected dwelling in Asbury Park to any person residing in another dwelling. Neither is there any evidence to show that the public schools acted as a center of infection, as will be shown by the accompanying table. This fact is undoubtedly due to the daily medical inspection service of the public schools, which affords a ready means for the detection of any pupil in attendance at school while suffering from a mild attack of the disease, and also to the prompt action on the part of the school authorities in causing the disinfection of all school-books and furnishings, and to the cleansing of the school buildings when suspected to have been exposed to infected persons. Aside from subsequent cases occurring in the same families, with the one exception above referred to, the various cases had no apparent relation one to another, and there seemed to be no common source of infection. It is a fact, however, that scarlet fever had prevailed in epidemic form in the districts adjacent to Asbury Park prior to and during the prevalence of the disease in this city.

A study of the following table shows that neither the public schools, Sunday schools or milk-supply constituted a source of infection during the outbreak of scarlet fever:

MONMOUTH COUNTY—Continued.

Case No.	Age.	Date of attack.	Last day in school prior to date of attack.	Class attended in public school.	Sunday-school attended.	Milk-supply.
1.....	4 years.....	March 10.....	January 31.....	First kindergarten.....	None.....	C. Covert.
2.....	10 ".....	" 12.....	March 8.....	Third grade.....	Methodist.....	W. R. Sickles.
3.....	6 ".....	" 9.....	" 11.....	Second kindergarten.....	Congregational.....	A. Truax.
4.....	12 ".....	" 15.....	" 15.....	Fifth grade, II.....	Episcopal.....	H. S. Wilson.
5.....	8 ".....	" 20.....	" 19.....	Fifth grade, II.....	Episcopal.....	C. V. Hurley.
6.....	13 ".....	April 7.....	April 5.....	Fourth grade, II.....	Baptist.....	Polhemus.
7.....	9 ".....	" 6.....	" 3.....	Third grade.....	German Lutheran.....	Truax. } Same family.
8.....	37 ".....	" 7.....	Not in school.....	Not in school.....	German Lutheran.....	Truax. }
9.....	11 ".....	" 7.....	April 5.....	Sixth grade, II.....	German Lutheran.....	Truax. }
10.....	16 ".....	" 12.....	February 1.....	Eighth grade.....	Baptist.....	Polhemus.
11.....	12 ".....	" 15.....	April 2.....	Fifth grade.....	Westminster.....	H. S. Wilson.
12.....	11 ".....	" 20.....	March 5.....	Fourth grade.....	Westminster.....	H. S. Wilson.
13.....	14 ".....	" 20.....	February 28.....	Sixth grade.....	Westminster.....	H. S. Wilson.
14.....	13 ".....	" 20.....	" 15.....	Seventh grade.....	Westminster.....	H. S. Wilson.
15.....	7 ".....	" 20.....	December 13 '09.....	First grade.....	Westminster.....	H. S. Wilson.
16.....	16 ".....	May 1.....	Not in school.....	Not in school.....	Methodist.....	W. R. Sickles.
17.....	3 ".....	" 3.....	Not in school.....	Not in school.....	None.....	E. Wyckoff.
18.....	3 ".....	" 6.....	Not in school.....	Not in school.....	None.....	E. Wyckoff. } Same family.
19.....	12 ".....	" 8.....	May 3.....	Seventh grade.....	Baptist and Lutheran.....	E. Wyckoff.
20.....	5 ".....	" 15.....	" 16.....	Kindergarten.....	Baptist.....	No regular supply.
21.....	3 ".....	" 18.....	Not in school.....	Not in school.....	None.....	No regular supply.
22.....	6 ".....	" 19.....	May 20.....	Kindergarten.....	None.....	No regular supply.
23.....	7 ".....	" 29.....	" 20.....	First grade.....	None.....	No regular supply.
24.....	7 ".....	" 29.....	Not in school.....	Not in school.....	None.....	No regular supply.
25.....	7 ".....	June 1.....	May 23.....	First grade.....	None.....	E. Brower.
26.....	7 ".....	" 8.....	June 10.....	Second grade.....	Episcopal.....	E. Wyckoff.
27.....	8 ".....	" 11.....	" 10.....	First grade.....	Baptist.....	W. R. Sickles.
28.....	7 ".....	" 9.....	" 7.....	First grade.....	Episcopal.....	E. Brower.
29.....	8 ".....	" 11.....	" 10.....	Second grade.....	Methodist.....	D. Potter.

MONMOUTH COUNTY—Continued.

The following chart shows that various sources of infection existed and that the disease was not directly transmitted from one case to another in Asbury Park, nor were the cases due to any common source of infection :

Infected probably through communicating with infected family residing outside of this city....	Case No. 1, March 10.	{ Case No. 16, May 1.
	Case No. 2, March 12.	
	Case No. 3, March 9.	
	Case No. 4, March 15.	
	Case No. 5, March 20.	
Possibly infected by a child who was ill in this family, but the nature of the illness was not at the time suspected....	Case No. 6, April 7.	{ Case No. 10, April 12.
	Case No. 7, April 6.	
	Case No. 8, April 7.	
	Case No. 9, April 7.	
Infection probably due to infected articles brought into house from a dwelling in which scarlet fever existed.....	Case No. 11, April 15.	Case No. 12, April 20.
		Case No. 13, April 20.
		Case No. 14, April 20.
		Case No. 15, April 20.
	Case No. 17, May 3.	{ Case No. 20, May 15.
	Case No. 18, May 6.	
	Case No. 19, May 8.	
	Case No. 22, May 19.	{ Case No. 23, May 29.
Evidently infected while out of the city.....	Case No. 25, June 1.	{ Case No. 24, May 29.
	Case No. 26, June 7.	
	Case No. 27, June 11.	
	Case No. 28, June 9.	
	Case No. 29, June 11.	

The superintendent of the public schools is promptly notified when the board of health receives information of the existence of any case of communicable disease in Asbury Park, and no pupil residing in any infected dwelling is permitted to attend school until a permit has been granted by the board of health for his return. In an effort to obtain the co-operation of the various Sunday schools in Asbury Park in restricting the spread of communicable diseases through the Sunday schools, the following letter was mailed to the superintendent of each such school :

DEAR SIR—The Asbury Park Board of Health, recognizing the dangers which attend contact in public gatherings with persons affected with communicable diseases, or with persons residing in infected dwellings, desires to secure the co-operation of Sunday school superintendents in Asbury Park in guarding against this source of danger to the public health through the Sunday schools. You are, therefore, respectfully invited to be present at a meeting of this board, to be held in the health office, No. 646 Mattison avenue, Tuesday evening, May 14th, 1901, at eight o'clock, when the above question will be considered.

Very respectfully,

D. C. BOWEN,
Secretary.

May 13th, 1901.

At this meeting the following resolution was adopted :

Resolved, That superintendents of all Sunday schools in the city of Asbury Park be requested to co-operate with the board of health in guarding against the spread of communicable diseases by the adoption of a rule requiring that no person known to be affected with a communicable disease, or residing in an infected dwelling, be

MONMOUTH COUNTY—*Continued.*

permitted to attend Sunday school until the superintendent has received a notice from the board of health stating that such infected premises has been cleansed and that the infective period has passed.

One case of varioloid occurred in the early part of December. The patient was a student attending the Horace Mann School, in New York. It was his custom to visit his parents, who reside in this city, Sunday of each week, and while here on one of his weekly visits he was taken ill with small-pox. The buildings used as a small-pox hospital, which were destroyed by fire during April, 1900, not having been replaced, owing to delay on the part of the city in acquiring title to land upon which a new building will be erected, the case was quarantined in a private dwelling and the usual precautions, isolation of the patient and attendants, vaccination of exposed persons and disinfection of infected persons and articles, prevented the spread of the disease. Two cases of diphtheria occurred in private families during the year. The cases had no relation to each other and the source of infection was not learned. There was one case of typhoid fever reported during the month of March and one case reported during the month of August. In the first case the source of infection was not learned. The second case was a summer visitor in Asbury Park, and there is every reason to believe that the disease had its origin outside of this city.

TABLE SHOWING THE NUMBER OF REPORTED CASES OF COMMUNICABLE DISEASES IN ASBURY PARK, AND DEATHS OCCURRING THEREFROM, DURING THE PAST SEVENTEEN YEARS.

YEARS.	Resident population (estimated except for census years.	NUMBER OF CASES REPORTED.						DEATHS.					
		Measles.	Scarlet fever.	Diphtheria.	Typhoid fever.	Consumption.	Small-pox.	Measles.	Scarlet fever.	Diphtheria.	Typhoid fever.	Consumption.	Small-pox.
1885	2,000	14	3	1	.....	.....	.....	.....	2	1	.....	2	.....
1886	2,125	4	2	9	.....	.....	.....	.....	.....	4	.....	5	.....
1887	2,250	82	7	7	.....	.....	.....	.....	.....	7	.....	3	.....
1888	2,375	.....	20	2	1	.....	.....	.....	1	1	.....	4	.....
1889	2,500	10	3	.....	1	.....	.....	.....	.....	1	.....	3	.....
1890	2,625	.....	16	6	.....	.....	.....	.....	1	2	.....	4	.....
1891	2,750	1	6	2	.....	.....	.....	.....	.....	.....	.....	5	.....
1892	2,875	36	4	7	1	.....	.....	.....	1	3	1	4	.....
1893	3,000	.....	7	6	.....	.....	.....	.....	.....	1	.....	3	.....
1894	3,380	7	7	2	4	1	8	.....	.....	.....	1	5	1
1895	3,761	6	5	5	7	1	.....	.....	.....	3	.....	2	.....
1896	3,838	39	3	2	1	.....	.....	.....	1	1	.....	7	.....
1897	3,916	5	14	15	2	1	.....	.....	.....	2	1	2	.....
1898	3,993	5	3	1	1	.....	.....	.....	.....	.....	.....	1	.....
1899	4,071	4	6	2	3	2	.....	.....	.....	.....	3	3	.....
1900	4,148	20	.....	4	2	.....	.....	.....	.....	1	.....	5	.....
1901	4,225	6	29	2	2	.....	1	.....	2	.....	.....	7	.....
Totals.....	.....	239	135	73	25	5	9	1	7	27	3	65	1

MONMOUTH COUNTY—*Continued.*

Free vaccination was offered during the year and among those to receive the benefit derived therefrom were one hundred and thirty school children. The vaccination status of the public school children, as shown by the Medical School Inspector's report at the close of the school year, 1900-1901, is as follows :

Vaccinated during year 1901.....	77
" " " 1900..	152
" " " 1899..	59
" " " 1898.....	56
" " " 1897	24
" " " 1896..	17
" " " 1895.....	25
" before 1895.....	41
" date not known.....	47
Had small-pox	1
Never vaccinated.	142
<hr/>	
Total number of pupils examined.....	641

The report further shows that forty-five pupils were referred, by teachers, to the medical school officer for examination, with the following results :

Ringworm of face.....	4
Ringworm of scalp	1
Pediculi cap.	2
Chr. sup. ot. med... ..	1
Alopecia areata.....	1
Scarlet fever	1
Gonorrheal ophthalmia	1
Pharyngitis	1
Hordeolum	3
Intercostal neuralgia	1
Defective eyesight.....	5
Urticaria	2
Disordered digestion	3
Eczema of face.....	1
Acute conjunctivitis.....	3
Acute laryngitis.....	1
Acute bronchitis	2
Tonsillitis	1
Stomatitis.....	1
Examined vaccination	1
Teachers' suspicions not verified.....	9

Twenty-one names, presented by teachers at a conference called by the school superintendent to consider backward pupils, resulted in seventeen cases being found to be below the standard in physical condition, or 80.95 per centum.

MONMOUTH COUNTY—*Continued.*

The report of the superintendent of the water department for the year ending April, 1901, shows a very marked decrease in the amount of water pumped, which is undoubtedly due to the introduction of water meters. The records in the health office show that the number of premises which are not supplied with water from the public water works have been gradually reduced, from year to year, until there are but nine dwellings in Asbury Park which are not supplied with water from the public water works. The report of the water department further states that the total amount of water pumped during the year was 179,795,880 gallons. The maximum monthly amount was 28,056,610 gallons for the month of August, and the minimum monthly amount was 8,952,060 gallons during the month of February.

Seventy plans and specifications for the construction of house drainage have been approved, and forty-eight notices for minor alterations and repairs in house drainage have been filed during the year.

Twenty-one privy vaults have been removed during the past year. Two hundred and thirty-seven of these objectionable structures are still in use. One hundred and ninety-nine are connected with the public sewers and thirty-eight are not sewer-connected. Complaints have been lodged by citizens against the offensive odors emitted from fifty-six of these structures. There are thirty-two buildings in Asbury Park which are not connected with the public sewers: seven dwellings, three churches, twelve business houses, and ten buildings not classified. There has been no change in the sewer system nor in the method of final disposal of sewage during the past year. There are two hundred and seventeen stable buildings in Asbury Park. One hundred and fifty-three with leaky board floors, and sixty-four with impervious floors and sewer connections. Properly drained impervious floors are required by ordinance in all newly constructed stable buildings.

The three years' contract, made by the city, under which garbage, dead animals and rubbish are collected, removed and disposed of, expires June 15th, 1902. The amount of garbage removed during the year ending October 1st, 1901, is slightly in excess of the amount removed during either of the preceding two years. It is shown by the following table, however, that the amount removed during the three summer months of 1901 is less than for the corresponding periods during the years 1899 and 1900, while the amount removed during the winter and spring months, and also for the month of August, 1901, was greater during the past year than for either of the two preceding years. The recommendation of the board that five additional garbage carts be purchased before the beginning of last summer was not adopted by the common council, thereby again necessitating the use of three wooden-bodied garbage wagons during the summer months. These additional carts are necessary for the improvement of the service, and their purchase will again be advised before the coming of another summer. The work of collecting would be greatly facilitated if the receptacles used for storing garbage and rubbish on private premises were of a uniform size, and an amendment to the health laws, permitting local boards of health to regulate, by ordinance, the size, material, and manner of construction of garbage and rubbish receptacles, is greatly to be desired.

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MONMOUTH COUNTY—Continued.

TABLE SHOWING THE AMOUNT OF GARBAGE REMOVED DURING THE PAST THREE YEARS.

WEEK ENDING.	Cubic yards removed.	WEEK ENDING.	Cubic yards removed.	WEEK ENDING.	Cubic yards removed.
1898.		1899.		1900.	
Oct. 8.....	40.82	Oct. 7.....	36.51	Oct. 6.....	42.96
" 15.....	21.45	" 14.....	32.76	" 13.....	37.59
" 22.....	24.68	" 21.....	32.23	" 20.....	34.37
" 29.....	24.67	" 28.....	31.15	" 27.....	28.99
Nov. 5.....	21.45	Nov. 4.....	30.07	Nov. 3.....	27.39
" 12.....	23.60	" 11.....	28.99	" 10.....	27.92
" 19.....	22.16	" 18.....	28.99	" 17.....	25.77
" 26.....	22.53	" 25.....	26.85	" 24.....	24.70
Dec. 3.....	16.09	Dec. 2.....	21.47	Dec. 1.....	26.31
" 10.....	20.39	" 9.....	22.55	" 8.....	25.24
" 17.....	17.18	" 16.....	22.55	" 15.....	23.09
" 24.....	19.33	" 23.....	19.87	" 22.....	23.62
" 31.....	18.25	" 30.....	17.72	" 29.....	25.77
1899.		1900.		1901.	
Jan. 7.....	18.25	Jan. 6.....	19.34	Jan. 5.....	24.70
" 14.....	13.94	" 13.....	18.25	" 12.....	25.77
" 21.....	16.09	" 20.....	19.33	" 19.....	24.70
" 28.....	16.10	" 27.....	18.79	" 26.....	23.62
Feb. 7.....	16.09	Feb. 3.....	16.65	Feb. 2.....	22.55
" 11.....	9.65	" 10.....	21.48	" 9.....	22.54
" 18.....	11.79	" 17.....	19.32	" 16.....	20.40
" 25.....	18.23	" 24.....	18.25	" 23.....	23.63
Mar. 4.....	19.32	Mar. 3.....	17.19	Mar. 2.....	24.70
" 11.....	19.31	" 10.....	18.79	" 9.....	23.09
" 18.....	20.38	" 17.....	20.40	" 16.....	24.70
" 25.....	19.32	" 24.....	20.40	" 23.....	25.24
April 1.....	19.32	" 31.....	19.86	" 30.....	25.77
" 8.....	21.46	April 7.....	20.93	April 6.....	25.77
" 15.....	21.46	" 14.....	20.94	" 13.....	25.77
" 22.....	22.50	" 21.....	22.54	" 20.....	25.77
" 29.....	21.46	" 28.....	21.47	" 27.....	25.77
May 6.....	21.47	May 5.....	24.16	May 4.....	24.70
" 13.....	22.03	" 12.....	25.78	" 11.....	26.85
" 20.....	27.92	" 19.....	26.85	" 18.....	27.92
" 27.....	27.92	" 26.....	29.53	" 25.....	29.00
June 3.....	33.82	June 2.....	34.91	June 1.....	34.37
" 10.....	40.25	" 9.....	43.49	" 8.....	33.28
" 17.....	48.35	" 16.....	52.62	" 15.....	37.05
" 24.....	58.53	" 23.....	63.91	" 22.....	57.99
July 1.....	84.86	" 30.....	74.11	" 29.....	64.45
" 8.....	162.35	July 7.....	122.44	July 6.....	109.56
" 15.....	156.78	" 14.....	140.70	" 13.....	133.84
" 22.....	208.03	" 21.....	163.52	" 20.....	157.75
" 29.....	230.06	" 28.....	194.26	" 27.....	178.24
Aug. 5.....	243.98	Aug. 4.....	221.47	Aug. 3.....	200.92
" 12.....	281.35	" 11.....	290.38	" 10.....	227.72
" 19.....	318.29	" 18.....	310.05	" 17.....	284.30
" 26.....	320.85	" 25.....	292.62	" 24.....	325.59
Sept. 2.....	260.89	Sept. 1.....	249.72	" 31.....	289.21
" 9.....	200.66	" 8.....	206.28	Sept. 7.....	219.89
" 16.....	141.78	" 15.....	123.11	" 14.....	145.77
" 23.....	97.74	" 22.....	91.29	" 21.....	109.55
" 30.....	67.65	" 29.....	74.10	" 28.....	77.32
	3,652.83		3,540.94		3,583.48

LOCAL BOARDS OF HEALTH.

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MONMOUTH COUNTY—*Continued.*

TABLE SHOWING THE AMOUNT OF RUBBISH REMOVED DURING THE PAST THREE YEARS.

WEEK ENDING.	Cubic yards removed.	WEEK ENDING.	Cubic yards removed.	WEEK ENDING.	Cubic yards removed.
1898.		1899.		1900.	
Oct. 8.....	150.6	Oct. 7.....	124.0	Oct. 6.....	148.0
" 15.....	100.2	" 14.....	116.0	" 13.....	120.0
" 22.....	76.0	" 21.....	108.0	" 20.....	124.0
" 29.....	68.0	" 28.....	108.0	" 27.....	112.0
Nov. 5.....	80.0	Nov. 4.....	80.0	Nov. 3.....	88.0
" 12.....	58.0	" 11.....	100.0	" 10.....	90.0
" 19.....	48.0	" 18.....	84.0	" 17.....	112.0
" 26.....	70.1	" 25.....	74.0	" 24.....	90.0
Dec. 3.....	28.0	Dec. 2.....	56.0	Dec. 1.....	80.0
" 10.....	70.0	" 9.....	66.0	" 8.....	80.0
" 17.....	54.0	" 16.....	64.0	" 15.....	84.0
" 24.....	54.0	" 23.....	66.0	" 22.....	84.0
" 31.....	52.0	" 30.....	54.0	" 29.....	84.0
1899.		1900.		1901.	
Jan. 7.....	44.0	Jan. 6.....	56.0	Jan. 5.....	72.0
" 14.....	42.0	" 13.....	60.0	" 12.....	72.0
" 21.....	48.0	" 20.....	64.0	" 19.....	72.0
" 28.....	46.0	" 27.....	74.0	" 26.....	80.0
Feb. 4.....	39.0	Feb. 3.....	60.0	Feb. 2.....	64.9
" 11.....	24.0	" 10.....	68.0	" 9.....	64.0
" 18.....	20.0	" 17.....	60.0	" 16.....	72.0
" 25.....	80.0	" 24.....	78.0	" 23.....	74.0
Mar. 4.....	76.1	Mar. 3.....	60.0	Mar. 2.....	64.0
" 11.....	60.2	" 10.....	92.0	" 9.....	72.0
" 18.....	74.1	" 17.....	72.0	" 16.....	92.0
" 25.....	110.1	" 24.....	100.0	" 23.....	116.0
April 1.....	114.3	" 31.....	92.0	" 30.....	124.0
" 8.....	114.2	April 7.....	136.0	April 6.....	156.0
" 15.....	118.3	" 14.....	116.0	" 13.....	180.0
" 22.....	106.2	" 21.....	148.0	" 20.....	128.0
" 29.....	108.2	" 28.....	144.0	" 27.....	156.0
May 6.....	128.2	May 5.....	132.0	May 4.....	182.0
" 13.....	148.4	" 12.....	136.0	" 11.....	156.0
" 20.....	138.3	" 19.....	136.0	" 18.....	144.0
" 27.....	152.3	" 26.....	188.0	" 25.....	188.0
June 3.....	158.7	June 2.....	192.0	June 1.....	214.3
" 10.....	154.3	" 9.....	208.0	" 8.....	257.4
" 17.....	172.2	" 16.....	224.0	" 15.....	228.0
" 24.....	200.2	" 23.....	226.0	" 22.....	240.0
July 1.....	244.4	" 30.....	232.0	" 29.....	224.0
" 8.....	206.3	July 7.....	196.0	July 6.....	236.0
" 15.....	293.4	" 14.....	248.0	" 13.....	260.0
" 22.....	252.2	" 21.....	276.0	" 20.....	304.0
" 29.....	256.0	" 28.....	286.0	" 27.....	272.0
Aug. 5.....	280.0	Aug. 4.....	272.0	Aug. 3.....	288.0
" 12.....	276.0	" 11.....	268.0	" 10.....	272.0
" 19.....	288.0	" 18.....	292.0	" 17.....	310.1
" 26.....	336.0	" 25.....	280.0	" 24.....	360.2
Sept. 2.....	268.0	Sept. 1.....	276.0	" 31.....	336.0
" 9.....	300.0	" 8.....	264.0	Sept. 7.....	304.0
" 16.....	264.0	" 15.....	222.0	" 14.....	264.0
" 23.....	216.0	" 22.....	192.0	" 21.....	188.0
" 30.....	172.0	" 29.....	168.0	" 28.....	208.0
	7,038.5		7,494.0		8,380.0

MONMOUTH COUNTY—Continued.

The garbage contractor's daily reports for the past two years show the following number of violations, by householders, of the health ordinances, in the manner of storing garbage and rubbish :

	1900.	1901.
Premises with leaky metal receptacles.....	21	44
Premises on which garbage was stored in wooden receptacles.	29	42
Garbage receptacles containing an excessive amount of fluids..	3	3
Premises on which garbage receptacles were inadequate.....	22	49
Premises on which garbage was stored in inaccessible places.....	....	1
Premises on which the garbage receptacles were too large to be conveniently emptied	8	1
Premises on which ashes were mixed with garbage.....	1	....
Premises on which rubbish was mixed with garbage.....	5	1
Premises on which rubbish contained prohibited substances.....	8	3
Total.....	97	144

The following table shows the number and nature of citizens' complaints received and investigated during the year :

TABLE SHOWING NATURE OF COMPLAINTS RECEIVED.

DATE OF COMPLAINTS.	Offensive odors in dwellings due to causes unknown to occupants	Overflowing and offensive privy vaults.	Overflowing catch-basins.	Placing rejectamenta from catch-basins upon the ground or in garbage or rubbish receptacles.	Obstructed drains and defective plumbing.	Offensive water-closet apartments.	Refuse accumulations in back yards.	Placing waste fluids upon the ground.	Keeping fowls, nuisance caused by.	Against garbage collectors.	Leaky and offensive garbage receptacles	Burning garbage and offensive substances.	Offensive fish markets.	Offensive butcher shops.	Offensive livery stables.	Offensive private stables.	Unclean streets and street gutters.	Dead animals in public streets.	Beating carpets in parks and on public grounds	Disturbing noises.	Leaky gas pipes and fixtures.	Adulterated milk.	Dead animals on private property.	Miscellaneous.	Totals.
1900.																									
October.....	1	2	....	....	....	....	....	1	....	6	....	....	1	....	....	....	....	....	....	....	....	....	2	1	16
November.....	....	....	1	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	5
December.....	....	....	1	....	....	....	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6
1901.																									
January.....	....	....	....	....	1	....	1	....	....	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6
February.....	....	....	2	....	....	....	1	1	1	5	....	....	....	....	....	....	....	....	....	....	....	....	4	....	18
March.....	....	....	1	....	1	....	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3	....	10
April.....	1	1	2	....	2	1	3	....	....	8	....	....	....	....	....	....	....	....	....	....	....	....	1	....	21
May.....	1	1	2	....	1	....	3	2	....	9	1	....	....	....	1	....	....	....	....	....	....	....	1	1	27
June.....	2	5	2	....	2	1	3	4	1	24	1	....	....	....	3	....	....	....	....	....	....	....	2	....	60
July.....	4	5	....	....	2	1	4	3	....	18	....	....	....	....	3	1	1	....	....	....	....	....	4	6	54
August.....	5	5	....	1	3	2	14	9	....	19	2	1	6	2	....	1	5	2	1	....	....	....	1	....	85
September.....	1	3	5	....	....	....	3	1	....	12	....	....	....	....	....	....	....	....	....	....	....	....	2	1	28
Totals.....	5	21	26	1	13	8	37	21	2	105	5	1	7	2	4	7	6	19	1	2	3	2	16	22	336

MONMOUTH COUNTY—*Continued.*

Of the one hundred and five citizens' complaints against the garbage contractor no just cause was found to exist in twenty-seven cases. Of the two hundred and thirty-one remaining complaints of nuisances, just cause for the complaint was found to exist in all but twenty cases.

One hundred and eighteen specimens of diseased tissues have been sent during the past year through this department to the State bacteriological laboratory for diagnosis, as follows:

	Positive.	Negative.	Total.
Specimens for examination in cases of suspected diphtheria.....	10	22	32
Gonococci.....	1	1	2
Tuberculosis.....	10	23	33
Malarial organism.....	30	16	46
Typhoid.....	3	2	5
Total	54	64	118

TABLE SHOWING THE NUMBER OF WRITTEN PERMITS ISSUED DURING THE YEAR,
BY MONTHS.

MONTHS.	Certificate of approval of plumbing plans.	Certificates of final approval of plumbing work.	To lay sub-surface drains.	To scavengers.	For collection of butchers' offal and fat.	Burial and transit.	Transit, local.	For the sale of ice.	To return to public school.	Notice to Sunday school superintendents after disinfection of infected premises.	Totals.
1900.											
October	8	7	.....	4	.....	5	.....	.....	.....	.....	24
November	5	3	.....	3	.....	.....	.....	.....	.....	.....	11
December.....	3	1	.....	3	.....	1	.....	.....	.....	.....	8
1901.											
January	5	5	.....	1	.....	4	.....	.....	4	.....	19
February	3	1	.....	.....	.....	.....	4	.....	2	.....	10
March	11	2	1	2	.....	4	3	.....	.....	.....	23
April.....	9	4	.....	3	.....	6	1	.....	19	2	44
May.....	11	1	.....	7	.....	10	3	1	17	1	51
June.....	9	16	.....	16	2	3	4	1	5	1	57
July.....	4	3	.....	17	3	10	5	.....	.....	1	43
August.....	.....	5	.....	6	.....	9	4	.....	.....	.....	24
September.....	2	.....	.....	2	.....	8	1	.....	2	.....	15
Totals	70	48	1	64	5	60	25	2	49	5	329

190 REPORT OF THE BOARD OF HEALTH.

MONMOUTH COUNTY—Continued.

OFFICE AND INSPECTION WORK.

Number of violations of health ordinances reported by inspectors during the year.....	811
Number of re-inspections of premises after notice to abate nuisances had been sent.....	209
Number of citizens' complaints investigated	336
Number of written orders sent for abatement of nuisances.....	302
Number of cases in which notice to abate nuisances were complied with without further action.	124
Number of cases referred to the board with request for instructions.....	35
Number of written communications sent from office.....	938
Number of inspections made of plumbing work under construction.....	219
Number of air-pressure tests applied to plumbing work under construction	84
Number of smoke tests applied to plumbing work	53
Number of notices for minor alterations and repairs in plumbing work, filed by plumbers, and inspection made of same.....	48
Number of plumbing plans filed.....	72
Number of plumbing plans approved.....	70
Number of plumbing plans disapproved.....	2
Number of specimens sent to State bacteriological laboratory and replies received through this office.....	118
Number of disinfections of dwellings.....	29

TABLE SHOWING NUMBER OF PROSECUTIONS FOR VIOLATING HEALTH ORDINANCES, FOR YEAR ENDING OCTOBER 1ST, 1901.

NATURE OF VIOLATION.	Number of suits ordered.	Nuisance abated before case was tried.	Judgment secured.	No convictions.	Cases pending.	Appealed by defendant.	Amount of judgments rendered.	Amount of judgments collected.
Violation of plumbing ordinance...	5	2	.....	.....	3	.....	.....	.....
Violation of milk ordinance.....	1	.....	1	.....	.....	.....	\$50 00	.....
Storing stable manure upon the ground.....	5	1	2	1	1	.....	50 00	\$25 00
Transporting offal without a permit.....	4	.....	2	.....	2	1	50 00	.....
Violating quarantine order.....	1	.....	.....	1	.....	.....	.....	.....
Pollution of ground by waste fluids.....	2	1	1	.....	.....	.....	25 00	25 00
Unclean and offensive fish markets.....	1	.....	1	.....	.....	.....	25 00	.....
Leaky and offensive privy vaults...	.....	.....	.....	.....	.....	.....	.....	25 00
Refuse accumulations stored upon ground.....	.....	.....	.....	.....	.....	.....	.....	25 00
Totals.....	19	4	7	2	6	1	\$200 00	\$100 00

MONMOUTH COUNTY—*Continued.*

In July, 1900, a suit was brought against Herman Rosenthal, of this city, for violating a section of the health ordinance by placing waste fluids and slops upon the ground. Judgment was rendered in favor of the board of health by the police justice. The case was removed, under *certiorari* proceedings, by the defendant to the Supreme Court. The decision of the Court is as follows:

NEW JERSEY SUPREME COURT,

November Term, 1901.

THE BOARD OF HEALTH OF ASBURY PARK,	}	On <i>Certiorari</i> .
<i>Def't in Certiorari,</i>		
<i>vs.</i>		
HERMAN ROSENTHAL,		
<i>Prosecutor.</i>		

Argued June 4th, 1901. Decided November 11th, 1901.

Before Justices Gummere and Hendrickson.

PER CURIAM. This is a summary conviction by a police justice for an alleged violation of an ordinance of the board of health of Asbury Park. Its validity has been challenged on various grounds that might have prevailed under the requirements of the common law, which have been sanctioned in *Preusser v. Cass*, 25 Vr. 533, and other cases. But in the proceedings by boards of health to enforce ordinances and to recover penalties prescribed therein, the statute has prescribed the form of the conviction. G. S., p. 1642, par. 41, sec. 3. This form has been followed with exactness in the present case, except that it omits the words "in a summary proceeding." The complaint and summons both show that such was the character of the proceeding. The omission of the words "in a summary proceeding" cannot work injury to a defendant and will not invalidate a conviction.

It is objected, further, that the conviction does not expressly charge the creation and maintenance of a nuisance, as was held to be necessary in *Morford v. Board of Health, &c.*, 39 A. 708. But in this case the facts are different. The ordinance describes and defines what nuisances shall be and what they shall include and embrace. And the complaint charges acts which are defined as a nuisance, and hence is not open to the objection sustained in the *Morford* case. The complaint and summons are also, we think, in proper form.

We are also asked to look into the evidence returned by the police justice as part of his transcript. The evidence is not embraced in the conviction and is not required to be under the prescribed form. Nor is it here pursuant to any rule of this court. The evidence not being properly a part of the record, we cannot examine it. *Lloyd v. Richman*, 28 Vr. 385.

There being no error in the proceedings, the writ will be dismissed, with costs.

We are informed that the defendant in the above case has removed the case to the Court of Errors and Appeals.*

Atlantic Township.—Levi Scobey, Assessor, Scobeyville.

No report received.

*The final decision in this case was rendered in June, 1902, and the action of the courts below was sustained. The defendant paid his fine.

MONMOUTH COUNTY—*Continued.*

Borough of Avon-by-the-Sea.—MEMBERS AND OFFICERS—Alexander Mullen, Munroe Newman, Alex. D. May, James Brighton; H. M. Dolan, Secretary.

Total number of dwellings in the borough, 72. One case of membranous croup was reported. Number of dwellings connected with water-supply, 60. Total length of sewers, one and one-half miles. Premises connected with sewers, 60. Sewage is discharged into the ocean. Annual cost of garbage removal, \$300. Four meetings were held by the board during the year.

Belmar Borough.—MEMBERS AND OFFICERS—Dr. C. R. Treat, Dr. Charles H. Thompson, Frank P. Philbrick, William M. Bergen, Neil H. Miller; Charles O. Hudnut, Secretary; Samuel C. Hoppock, Inspector.

Total number of dwellings, 500. Communicable diseases were reported as follows: Diphtheria, 1; scarlet fever, 3; typhoid fever, 12. Total number of dwellings connected with water-mains, 359. Recent water connections, 47. There are 350 premises connected with the sewer, and 29 premises were connected with sewers during the year. Sewage is discharged into the sea. Garbage is collected daily during the summer. Total cost of garbage collection, \$500. Four meetings were held during the year.

Bradley Beach Borough.—MEMBERS AND OFFICERS—Peter B. Poland, George Herbert, Samuel Borden, Johnson Rogers; Samuel B. Murphy, Secretary; Samuel Patterson, Attorney, Asbury Park.

Total number of dwellings, 245. One case of diphtheria was reported. Ten dwellings have been connected with the public water-supply during the year. There is no sewer system in the borough. Nuisances investigated and abated, 2. Nine meetings were held by the board of health.

Deal Borough.—MEMBERS AND OFFICERS—G. W. Wert, Wm. Hogencamp, Wm. R. McMichael, Jr.; Geo. H. Thompson; E. L. Cowart, Secretary; Chas. J. McDaniel, Inspector; Samuel W. Hendrickson, Inspector; all of Deal Beach; John F. Hawkins, Attorney, Asbury Park.

Number of dwellings, 70. Two cases of typhoid fever occurred. One meeting was held.

Englishtown Borough.—No organized board of health.

MONMOUTH COUNTY—*Continued.*

Town of Freehold.—MEMBERS AND OFFICERS—I. S. Long, M.D.; O. R. Freeman, M.D.; Harvey L. Brown, M.D.; W. H. Ingling, S. L. Bennett; J. O. Burt, Secretary.

Five cases of diphtheria, 2 of scarlet fever and 1 of typhoid fever were reported. If cases of small-pox occur the Long Branch isolation hospital will be used. Total number of dwellings connected with the public water-supply, 410. New water connections made during the year, 11. Total number of premises connected with sewers, 313. Premises connected with sewers during the year, 220. Number of nuisances abated, 16. Four meetings were held.

Freehold Township.—MEMBERS AND OFFICERS—Peter F. Conover, John P. Walker, Millard F. Conover, John B. Parker; Ruliff V. Lawrence, Secretary; Otis R. Freeman, M.D., Inspector. All of Freehold.

Two cases of scarlet fever and 1 of typhoid fever occurred. One complaint was investigated. Two meetings were held.

Highlands Borough.—MEMBERS AND OFFICERS—Allen R. Reid, Chas. S. Parker, John Foster, John W. Sailor, Fred. E. Johnson; Silvanos L. Liming, Secretary; Chas. Snider, Attorney.

Total number of dwellings, 155. Twenty-four nuisances were abated. Twelve meetings were held.

Holmdel Township.—MEMBERS AND OFFICERS—Wesley Mason, Keyport; Jacob O. Lamberton, Keyport; Jonathan I. Holmes, Holmdel; Aaron Longstreet, Secretary, Keyport; Dr. Fred. V. Thompson, Inspector; A. C. Hartshorne, Attorney, Freehold.

Howell Township.—MEMBERS AND OFFICERS—Chas. A. Palmer, M.D., Farmingdale; Benj. M. Cooper, Lakewood; Robert H. Morris, Turkey; Chas. E. Farry, Farmingdale; James H. Butcher, Secretary, Ardena.

Six meetings were held.

Town of Keyport.—MEMBERS AND OFFICERS—Augustus Maurer, Abraham Huyler, W. C. Smith, Elgin E. Cline, Frank S. Mason; D. E. Roberts, Secretary; James M. Walling, Inspector.

Communicable diseases were reported as follows: Diphtheria, 23; scarlet fever, 25; small-pox, 2. Total number of dwellings connected with water-mains, 489, of which 55 were connected during the year. Eight meetings were held.

MONMOUTH COUNTY—*Continued.*

Manalapan Township.—MEMBERS AND OFFICERS—Edward Hendrickson, Manalapan; Daniel S Aumack, Englishtown; J. V. N. DuBois, Tennent; A. T. Applegate, M.D., Englishtown; S. C. Bowne, Assessor, Tennent; Garret B. Conover, Secretary, Englishtown.

Three meetings were held.

Manasquan Borough.—MEMBERS AND OFFICERS—A. Howell Miller, George F. Mount, John Chapman; Ernst Koch, Secretary; Robert M. Marks, Inspector; Parker & Pearce, Attorneys.

Total number of dwellings, 293. Communicable diseases were reported as follows: Diphtheria, 1; scarlet fever, 1; small-pox, 8. Eight complaints were investigated. Three nuisances were abated. Twenty meetings were held.

Matawan Borough.—MEMBERS AND OFFICERS—Isaac Bedle, President; Wm. Hardwick, Jesse Sickels, F. Lisk, A. J. Jackson, M.D.; Wm. Rogers, Secretary; J. W. Maggs, Inspector.

Matawan Township.—MEMBERS AND OFFICERS—Michael Holleran, President; Christopher Winters, Ten Eyck Conover, John E. Kuhns, Jr., C. H. Knecht, M.D.

Middletown Township.—MEMBERS AND OFFICERS—John Woodward, Atlantic Highlands; D. W. Vanote, Belford; G. C. Morris, New Monmouth; Omar Sickles, Secretary, Navesink; Dr. O. W. Budlong, Inspector, Belford; John E. Foster, Attorney, Atlantic Highlands.

Three cases of scarlet fever and 3 of small-pox occurred.

Millstone Township.—MEMBERS AND OFFICERS—John H. Ely, Perrineville; Edward Martin, Clarksburg; John B. Ely, Ely; Geo. J. Ely, Secretary, Perrineville; W. T. McMillan, M.D., Inspector, Perrineville.

Two meetings were held.

Neptune City Borough.—MEMBERS AND OFFICERS—James Estell, Chas. Southard, John Slocum, Fred. Mason; Whitfield Smith, Secretary; post-office address of all of Avon; Ruliff V. Lawrence, Asbury Park.

Three cases of scarlet fever were reported. Six complaints were investigated and 5 nuisances abated. Six meetings were held.

Ocean Grove.—MEMBERS AND OFFICERS—A. E. Ballard, Hon. James L. Hays, Newark; J. R. Daniels, George W. Evans, J. H. Alday, M.D.; H. B. Alday, M.D., Secretary.

MONMOUTH COUNTY—*Continued.*

Total number of dwellings, about 1,380. Two cases of diphtheria, 12 of scarlet fever and 1 of typhoid fever were reported. Dwellings connected with water-mains, 1,349. Number of premises connected with sewers, 1,192. Total cost of garbage collection and removal, \$1,200. Eight meetings were held.

Raritan Township.—MEMBERS AND OFFICERS—Leonard D. Roberts, John S. Hendrickson, John W. Mason; John H. Fitzgerald, Secretary; W. Conover Smith, Registrar. All of Keyport.

Town of Red Bank.—MEMBERS AND OFFICERS—Charles D. Warner, Samuel Sabbath, Frank P. Stryker, John Shehan; Henry J. Child, Secretary; Theodore Sniffin, Inspector; Edmund Wilson, Attorney.

Communicable diseases were reported as follows: Diphtheria, 5; scarlet fever, 9; typhoid fever, 12; small-pox, 2. Total number of dwellings connected with public water-supply, 853. Water connections made during the year, 78. Premises connected with sewers, 100. Number of nuisances abated, 121. The isolation hospital for small-pox cases is located two miles from the city. Four meetings were held.

Shrewsbury Township.—MEMBERS AND OFFICERS—W. C. Armstrong, M.D., Red Bank; Wm. T. Parker, Little Silver; Forman R. Smith, Fair Haven; Borden Hance, Red Bank; A. C. Harrison, Secretary, Red Bank; A. L. Ivins, Registrar, Red Bank; Wm. Curchin, Inspector, Fair Haven.

Communicable diseases were reported as follows: Diphtheria, 3; scarlet fever, 4; typhoid fever, 2; small-pox, 1. Number of nuisances abated, 50. Fifteen meetings were held.

Spring Lake Beach Borough.—MEMBERS AND OFFICERS—H. P. Brown, Richard Devine, S. R. Knight, W. D. Robinson; Ellwood H. Newman, Secretary; Frederick Durand, Attorney, Asbury Park.

One hundred and eighty dwellings are connected with the public water-supply and also with the sewer system. Two meetings were held.

Upper Freehold Township.—MEMBERS AND OFFICERS—William Kirby, Cream Ridge; I. S. Dawes, Imlaystown; E. A. Hyers, Red Valley; F. C. Price, M.D., Secretary, Imlaystown; Wm. Quicksell, Registrar, Hornerstown; H. C. Harts-horne, Attorney, Freehold.

MONMOUTH COUNTY—*Continued.*

Two meetings were held.

Wall Township.—MEMBERS AND OFFICERS—Henry Stines, Belmar; Chas. Gifford, Allenwood; Chas. White, Como; Geo. E. Rogers, Secretary, New Bedford; E. P. Longstreet, Attorney, Manasquan.

Total number of dwellings, 520. Six cases of diphtheria and 16 of scarlet fever occurred. Three nuisances were abated. Eight meetings were held.

MORRIS COUNTY.

Town of Boonton.—MEMBERS AND OFFICERS—Charles Brock, Thomas Capstick, William Q. Powers, John E. Dunn; M. L. Brower, Secretary; Albert E. Estler, Inspector.

Chatham Borough.—MEMBERS AND OFFICERS—Joseph H. Conklin, W. J. Wolfe, M.D.; William Hendershot, George E. Hall; D. H. Crawford, Secretary; Wesley R. Conklin, Inspector; F. H. Lum, Attorney.

Number of dwellings, 248. One case of scarlet fever was reported. Annual appropriation, \$100. Ten meetings were held.

Dover City.—MEMBERS AND OFFICERS—Eugene Buchanan, John G. Taylor, Frank J. Keifel, Wm. Bell, J. H. C. Hunter, D.D.S., Secretary; James H. Neighbour, Attorney.

Number of dwellings, 1,505. Communicable diseases were reported as follows: Diphtheria, 15; scarlet fever, 23. Nuisances abated, 200. One suit was instituted by the board for failure of physician to make report of contagious disease, and conviction was secured. Nineteen meetings were held.

Florham Park Borough.—MEMBERS AND OFFICERS—Wm. A. Hopping, Afton; Frank M. Budd, Chatham; Edward W. Schofield, Madison; Charles H. Genung, Madison; Henry W. Young, Secretary, Afton; Stuart H. Reed, M.D., Madison; R. B. Moriarty, Attorney, Morristown.

Total number of dwellings, 126. One meeting was held.

Mendham Township.—MEMBERS AND OFFICERS—J. H. Gunther, George S. Beevers, George Savage; J. D. Lindsley, Secretary; Geo. S. De Groot, M.D., Inspector. All of Mendham.

Two cases of diphtheria were reported.

MORRIS COUNTY—*Continued.*

Mt. Arlington Borough.—MEMBERS AND OFFICERS—R. J. Chaplin, F. W. Zuck, F. H. Tappen, Secretary; H. C. Upeburch, M.D.; Cyrus E. Cook, Registrar; D. T. Trundy, Inspector.

Total number of dwellings, 98. Three meetings were held.

Mt. Olive Township.—MEMBERS AND OFFICERS—M. K. Thorp, Flanders; John Smith, Budd Lake; R. H. Stephens, Mt. Olive; S. W. Salmon, Secretary, Mt. Olive; W. S. Foster, M.D., Inspector, Flanders.

Total number of dwellings, 275. One case of diphtheria and 10 of scarlet fever were reported. One meeting was held.

Mt. Tabor Borough.—MEMBERS AND OFFICERS—C. L. Pitts, Newark; F. N. Barrett, New York City; J. S. Shaw, Newark; J. P. Contrell, Newark; T. A. Lowe, Secretary, Jersey City; J. H. Cox, Inspector, Tabor.

Total number of dwellings, 215, all of which are connected with the public water-supply. Two meetings were held.

Pequannock Township.—MEMBERS AND OFFICERS—Giles M. Roome, Lincoln Park; Garret D. Smith, Butler; Chas. M. Mandeville, Pompton Plains; Chas. D. Decker, Secretary, Butler; C. D. V. Romondt, M.D., Inspector, Pompton Plains.

Four cases of diphtheria and 4 of scarlet fever were reported. Three meetings were held.

Randolph Township.—MEMBERS AND OFFICERS—George Poole, Mt. Freedom; J. L. Connolly, Mine Hill; John Blackwell, Mt. Freedom; T. O. Bassett, Secretary, Dover.

Total number of dwellings, about 400. Two cases of scarlet fever were reported. No meetings were held.

Rockaway Borough.—MEMBERS AND OFFICERS—E. H. Todd, Geo. S. Dearborn, M.D.; Geo. H. Foster, M.D.; M. B. Strait, Harry R. Watson, Wm. McKinnon; William May, Secretary; Wm. Parlman, Registrar; H. R. Dobbins, Inspector; John F. Stickle, Attorney.

Total number of dwellings, 303. Three cases of diphtheria were reported. One complaint was investigated. Eight meetings were held.

Rockaway Township.—MEMBERS AND OFFICERS—Daniel Dunham, Denville; Thomas Grant, Hibernia; Anthony Vanderbilt, Hibernia; F. W. Flagge, M.D., Rockaway; David A. Wiggins, Secretary, Rockaway.

MORRIS COUNTY—*Continued.*

Three cases of diphtheria and 7 of scarlet fever were reported. Four meetings were held.

Roxbury Township.—MEMBERS AND OFFICERS—David Jardine, Kenvil; R. H. Cary, Ledgewood; Theodore F. King, Ledgewood; N. H. Adsit, M.D., Succasunna; E. N. Corwin, Secretary, Succasunna; Richard Fitzherbert, Attorney, Succasunna.

Four cases of diphtheria and 10 of scarlet fever were reported. Three meetings were held.

OCEAN COUNTY.

Bay Head Borough.—No organized board of health. Julius Foster, Assessor.

Total number of dwellings, 120. Number of dwellings connected with water-supply, 115. The public supply is obtained from artesian wells.

Beach Haven Borough.—MEMBERS AND OFFICERS—Thomas Cale, F. H. Potts, T. A. Gavin; W. F. Beer, Secretary.

Total number of dwellings, 130. Public sewers were introduced in 1893. Sewage is discharged into the bay, one-half mile below the borough. Two meetings were held by the board.

Berkley Township.—MEMBERS AND OFFICERS—Ernest Worth, Thomas J. Harvey, William H. Paten; M. B. Allen, Secretary; Devine Butler, Registrar. All of Bayville.

Total number of dwellings, 245. Three cases of membranous croup were reported.

Brick Township.—MEMBERS AND OFFICERS—J. L. Dorsitt, West Point Pleasant; Jas. D. Stillwell, Mantoloking; J. H. Harvey, West Point Pleasant; Geo. W. Van Nott, Secretary, Burrsville; Dr. F. Whittaker, M.D., Point Pleasant; E. P. Longstreet, Attorney, Manasquan.

Total number of dwellings, 400. Three cases of scarlet fever occurred. Two nuisances were abated. The board held one meeting.

OCEAN COUNTY—*Continued.*

Eagleswood Township.—MEMBERS AND OFFICERS—P. R. Sprague, West Creek; Oscar Parker, West Creek; A. J. Leigh, West Creek; Theo. F. Price, M.D., Tuckerton; E. F. Cranmer, Secretary, West Creek.

Number of dwellings, 150 (ap.) Three cases of typhoid fever were reported. Three meetings were held.

Lacey Township.—MEMBERS AND OFFICERS—A. G. Wilbert, George Frazee, Wm. H. Penn; B. F. Mathews, Secretary; G. E. Wallace, M.D., Inspector. All of Forked River.

One case of typhoid fever occurred. One meeting was held.

Lakewood Township.—MEMBERS AND OFFICERS—Peter V. Hoyt, William Sculthorpe, L. K. Clough, G. W. MacMillian, M.D.; Alex. M. Manolt, Secretary; R. B. Robbins, Registrar.

Total number of dwellings, 1,000. Ten cases of diphtheria, 8 of scarlet fever and 3 of typhoid fever were reported. Number of dwellings connected with public water-mains, 330, of which 30 were connected during the past year. Number of dwellings connected with sewers, 330. Sewer connections made during the year, 30. Nuisances abated, 4. Three meetings were held.

Lavalette Borough.—No organized board of health. Robert H. Good, Borough Clerk.

Little Egg Harbor Township.—MEMBERS AND OFFICERS—George W. Mott, Tuckerton; Norwood Parker, Parkertown; James Ludlow, Tuckerton; J. L. Lane, M.D., Secretary, Tuckerton.

Total number of dwellings, 201. One nuisance was abated. No meetings were held.

Manchester Township.—MEMBERS AND OFFICERS—Walter A. Larrabee, Lakehurst; Charles Stults, Charles Brandt, Alfred W. Carr; Harold Pittis, M.D., Secretary.

Ocean Township.—MEMBERS AND OFFICERS—C. F. Jones, E. R. Penn, O. D. Brown, J. H. Wilkins, Secretary, Waretown.

One meeting was held.

Plumsted Township.—MEMBERS AND OFFICERS—Elmer Cowperthwait, New Egypt; John Headley, New Egypt; Dayton Hopkins, Hornerstown; C. E. Woodward, M.D., New Egypt; Daniel W. Bussom, Secretary, New Egypt.

200 REPORT OF THE BOARD OF HEALTH.

OCEAN COUNTY—*Continued.*

Total number of dwellings, 280. One nuisance was abated. One meeting was held.

Point Pleasant Beach Borough.—MEMBERS AND OFFICERS—Theo. Delteure, R. L. Wack, Frank I. Bennett, George C. Newbury; W. E. Pearce, Secretary.

Total number of dwellings, 229. Thirteen complaints were investigated and 10 nuisances abated. Three meetings were held.

Sea Side Park Borough.—No organized board of health.

Stafford Township.—MEMBERS AND OFFICERS—W. K. Barrett, M.D., Barnegat; Chas. H. Cranmer, Manahawkin; Edward C. Predmore, Manahawkin; George A. Cranmer, Cedar Run; John B. Courtney, Secretary, Manahawkin.

Total number of dwellings, 200. Two cases of typhoid fever were reported. One nuisance was abated. Three meetings were held.

PASSAIC COUNTY.

Acquackanonk Township.—MEMBERS AND OFFICERS—John H. Prentiss, Albion Place; S. Grant Thornburn, Clifton; Henry Fredericks, Delawanna; Richard Berry, Secretary, Clifton; Hon. Wm. Gourly, Attorney.

Total number of dwellings in township, 1,500 (ap.) Number of tenements, 21. Communicable diseases were reported as follows: Diphtheria, 7; deaths, 1; scarlet fever, 5; typhoid fever, 2; small-pox, 1. Printed blanks for reporting communicable diseases are furnished physicians by the local board of health. Reports of communicable diseases are received and transmitted by the secretary of the board. Number of dwellings connected with the public water-supply is about 150. Complaints investigated during the year, 12. Nuisances abated, 12. The cutting and sale of ice is regulated by the board of health. There are about 200 unvaccinated school children in the township. Ten meetings were held.

Little Falls Township.—MEMBERS AND OFFICERS—F. C. Bussing, Little Falls; S. P. Hanson, West Park; Chas. H. Newman, Little Falls; James De Mouth, Secretary, Little Falls; Wm. R. Smith, Inspector, Little Falls; James G. Blauvelt, Attorney, Paterson

Four cases of diphtheria and 3 of typhoid fever were reported.

PASSAIC COUNTY—*Continued.*

In addition to this a number of cases of scarlet fever occurred. Four nuisances were abated. Nine meetings were held.

Manchester Township.—MEMBERS AND OFFICERS—Gilbert McDaniels, Charles Erving, David McKersie; Chas. H. Banta, Secretary; A. A. Lydecker, Inspector; W. J. Barbour, Attorney. All of Haledon.

Total number of dwellings, 600. Seventeen cases of diphtheria, 4 of scarlet fever and 2 of typhoid fever were reported. Nuisances abated, 24. Fourteen meetings were held.

Paterson City.—MEMBERS AND OFFICERS—Andrew F. McBride, M.D.; John R. Hurley, Franklin Van Winkle, John H. Banta, M.D.; Thos. L. Paton, M.D.; Byran C. Magennis, M.D., Health Inspector; James P. McNair, Secretary; John T. Pollitt, Registrar; Wm. H. MacDonald, Plumbing Inspector; Jas. Fitzpatrick, Sanitary Inspector; P. J. Kinney, Sanitary Inspector; James Higgins, Attorney.

Communicable diseases from March 1st, 1900, to February 28th, 1901, were reported as follows: Diphtheria, 279; scarlet fever, 405; typhoid fever, 112; small-pox, 43. Eleven thousand dwellings are connected with the public water-supply and 10,500 premises are connected with sewers. Complaints investigated, 1,721. Nuisances abated, 1,622. Following is a summary of legal actions instituted by the board: Number of complaints made in the recorder's court, 1; number of cases tried in the recorder's court, 1; number of cases decided in favor of the board, 1; number of cases in which fines were imposed, 0; number of complaints made in the district court, 20; number of cases tried in the district court, 19; number of cases decided in favor of the board of health, 16; number of cases in which fines were imposed, 7. Twenty meetings were held.

Pompton Township.—MEMBERS AND OFFICERS—James E. Sloat, Midvale; E. J. Brown, Midvale; Walter C. White, Bloomingdale; D. Reeve Sloan, Secretary, Bloomingdale; David A. Shipper, M.D., Inspector, Midvale; W. C. Cabal, Attorney.

One case of scarlet fever was reported. Five nuisances were abated. Four meetings were held.

West Milford Township.—MEMBERS AND OFFICERS—C. Lakoe, Newfoundland; Wm Eckhart, Newfoundland; Martin J. Shippee, Echo Lake; Dr. T. L. Coursin, Oak Ridge; Joseph Tintle, Secretary, Echo Lake; Celestine Schulster, Registrar, Echo Lake; Wm. J. Barkam, Attorney, Paterson.

One case of diphtheria occurred. Three meetings were held.

SALEM COUNTY.

Alloway Township.—MEMBERS AND OFFICERS—John H. Vanleer, Friesburg; Charles Timberman, Alloway; James A. Vron, Alloway; Wm. E. Simkins, Secretary, Aldine; Dr. Warren L. Ewen, Inspector, Alloway; Wm. T. Hilliard, Attorney, Salem.

Dwellings in township, 380. No communicable diseases were reported. No blanks have been furnished physicians for reporting such cases and no book has been provided for use in recording such reports. One meeting was held.

Elsinboro Township.—MEMBERS AND OFFICERS—Isaac Harris, Abel Harris, Lewis Medkill; Chas. P. Tarnkoff, Secretary. All of Salem.

Oldmans Township.—MEMBERS AND OFFICERS—Henry Reymer, Pedricktown; Frank J. Gaventa, Pedricktown; Joseph Roberts, Auburn; Levi C. Justice, Registrar, Pedricktown; Allen B. Black, Inspector, Pedricktown.

Seven cases of scarlet fever and 1 of typhoid fever were reported. One nuisance was abated. Two meetings were held.

Penn's Grove Borough.—MEMBERS AND OFFICERS—Richard F. Shannon, Warren C. English, Walter S. Springer, John C. Simpkins; Henry M. Flanagan, Secretary.

Total number of dwellings, 454. Four cases of diphtheria, 5 of scarlet fever and 4 of typhoid fever were reported. A public water-supply is being introduced. Seven nuisances were abated. Fifteen meetings were held.

Piles Grove Township.—MEMBERS AND OFFICERS—Samuel A. Ridgway, Woodstown; Edgar C. Moore, Woodstown; Clement McAllister, Sharptown; D. F. Davis, Secretary, Woodstown.

One case of diphtheria and 1 of scarlet fever were reported. Three meetings were held.

Salem City.—MEMBERS AND OFFICERS—Lewis Hoelzel, Thomas Hewes, E. J. Gayner, Ellen B. Smith, M.D.; C. L. Sinnickson; Clinton Bowen, Secretary; Austin T. Walton, Inspector; C. M. Sherron, M.D.

Total number of dwellings, 1,168. One case of diphtheria was reported. Number of dwellings connected with public water-supply, 625. Water connections made during the year, 12. Premises con-

SALEM COUNTY—*Continued.*

nected with sewers, 227. Sewer connections during the year, 15. Number of nuisances abated, 93. Eight meetings were held.

Upper Penns Neck Township.—MEMBERS AND OFFICERS—John M. Bevis, Joseph E. Clark, James Hutchinson; George W. Hewitt, Secretary. All of Pennsgrove.

One meeting was held.

Upper Pittsgrove Township.—MEMBERS AND OFFICERS—William Mayhew, Pittsgrove; Henry Coombs, Elmer; Nathaniel Wilkinson, Whiglane; R. A. Robinson, Secretary, Monroeville; Geo. W. Fitch, M.D., Inspector, Daretown.

Two cases of scarlet fever occurred. Two nuisances were abated. Three meetings were held.

SOMERSET COUNTY.

Bedminster Township.—MEMBERS AND OFFICERS—J. M. Pickell, Peapack; R. B. Duyckinck, Lamington; Chas Hoffman, Pottersville; W. D. Vanderbeek, Secretary, Gladstone; E. F. Farrow, M.D., Inspector, Peapack; M. C. Smalley, M.D., Inspector, Gladstone; J. B. Beekman, M.D., Inspector, Pluckamin.

One case of diphtheria was reported during the year. One meeting was held by the board.

Bound Brook Borough.—MEMBERS AND OFFICERS—R. H. Brokaw, C. R. P. Fisher, M.D.; W. H. Brokaw; W. S. Negus, Secretary; Chas. McNabb, Register.

Total number of dwellings, 385. Four cases of diphtheria and 1 of scarlet fever were reported. Plans have been completed for the erection of a hospital. Nuisances investigated, 18, all of which were abated. Thirteen meetings were held by the board.

Bridgewater Township.—MEMBERS AND OFFICERS—James Q. Ten Eyck, Somerville; John H. Bartle, Somerville; Oscar Dow, Raritan; C. L. Voorhees, Secretary, Somerville; Dr. L. M. Lanning, Inspector, Somerville.

Four cases of diphtheria were reported. Three nuisances were abated. Three meetings were held.

SOMERSET COUNTY—*Continued.*

Franklin Township.—MEMBERS AND OFFICERS—N. S. Wilson, East Millstone; Samuel Voorhees, Middlebush; Wm. J. Cortelyou, Franklin Park; L. J. Suydam, Secretary, New Brunswick; J. Howard Cooper, M.D., Inspector, Middlebush.

Eight cases of diphtheria, 3 of scarlet fever and 2 of typhoid fever occurred. Three complaints were investigated and one nuisance was abated. Two meetings were held.

Hillsborough Township.—MEMBERS AND OFFICERS—J. V. Opie, Somerville; G. Spencer Van Cleef, Millstone; J. V. A. Sutphen, Three Bridges; Wm. H. Merrell, M.D., Secretary, South Branch; John H. Saums, Registrar, Millstone.

One meeting was held.

Millstone Borough.—MEMBERS AND OFFICERS—William Esler, E. M. Davis, Wm. E. Kitchen, James H. Hageman, John Ditmars; Wm. H. Polhemus, Secretary; Edward T. Wright, Registrar; S. O. B. Taylor, M.D., Inspector.

Total number of dwellings, 56. One meeting was held.

Montgomery Township.—MEMBERS AND OFFICERS—Spencer Whitlock, Blawenburg; M. N. Staats, Griggstown; Geo. W. Campbell, Secretary, Griggstown; C. B. Allhouse, Registrar, Harlingen.

One case of diphtheria occurred. One nuisance was abated.

North Plainfield Borough.—MEMBERS AND OFFICERS—Andrew Love, L. E. Barkalew, D. C. Adams, M.D.; B. J. Shreve; Rev. W. E. Honeyman, Secretary; Wm. M. Pangborn, Inspector; Hon. Chas. A. Reed, Attorney.

Total number of dwellings, 938. Communicable diseases were reported as follows: Diphtheria, 8; scarlet fever, 26; typhoid fever, 5. Number of complaints investigated, 202, and 202 nuisances were abated. Two suits were brought by the board for violation of ordinances. Ten meetings were held.

North Plainfield Township.—MEMBERS AND OFFICERS—Chas. P. Sebring, Dunellen; Thos. H. Taylor, Plainfield; D. C. Adams, M.D., Plainfield; Wm. H. Morris, Secretary, Dunellen; Geo. N. Steward, Inspector, Plainfield; Coddington & Swackhammer, Attorneys, Plainfield.

Four cases of diphtheria were reported. Five nuisances were abated. Two meetings were held.

SOMERSET COUNTY—*Continued.*

Town of Somerville.—MEMBERS AND OFFICERS—Aaron L. Stillwell, M.D.; Thomas H. Flynn, M.D.; John B. Osborne, John E. Wehrly; W. R. Sutphen, Secretary; George D. Totten, Inspector; James L. Griggs, Attorney.

Communicable diseases were reported as follows: Diphtheria, 12; scarlet fever, 5; typhoid fever, 14. Total number of dwellings connected with the public water-supply, 727. Number of nuisances abated, 26. Nine meetings were held.

Warren Township.—MEMBERS AND OFFICERS—Wm. H. Rogers, Plainfield; Henry P. Williams, Warrenville; Thomas C. Bird, Gallia; Peter Newmiller, Secretary, Warrenville.

Total number of dwellings, 260. Two cases of diphtheria, 2 of scarlet fever and 1 of typhoid fever occurred. One meeting was held.

SUSSEX COUNTY.

Andover Township.—MEMBERS AND OFFICERS—Wm. M. Slater, Newton; B. K. Stiff, Andover; C. C. Cox, Newton; Wm. Iliff, Secretary, Newton; J. C. Clark, M.D., Inspector, Andover; Levi H. Morris, Attorney, Newton.

Total number of dwellings, 300. Communicable diseases were reported as follows: Diphtheria, 38; typhoid fever, 1. Number of complaints investigated, 3. Nuisances abated, 1. Five cows, showing tubercular symptoms, were destroyed. There are 75 unvaccinated school children in the township. Two meetings were held during the year.

Byram Township.—MEMBERS AND OFFICERS—Samuel Peterson, Stanhope; Hiram Stone, Andover; Peter D. Smith, Waterloo; E. O. Valentine, Secretary, Stanhope; C. K. Danson, Inspector, Stanhope; Elmer King, Attorney, Netcong.

Greene Township.—MEMBERS AND OFFICERS—Peter Martin, Tranquility; C. F. Ayres, Huntsville; A. C. Snook, Newton; M. W. Northup, Secretary, Huntsville; John Swayze, Attorney, Newton.

Total number of dwellings, 139. Two cases of scarlet fever were reported. One nuisance was abated. Three meetings were held.

SUSSEX COUNTY—*Continued.*

Hampton Township.—MEMBERS AND OFFICERS—John H. Williams, Baleville; John W. Thompson, Blair; M. H. Northup, Baleville; Frank Emmans, Secretary, Newton; Dr. Joseph Hedges, Inspector, Branchville; David B. Hetzel, Attorney, Newton.

Total number of dwellings, 167. One meeting was held.

Hardyston Township.—MEMBERS AND OFFICERS—Smith Simpson, Hamburg; Charles McCarthy, Franklin Furnace; Caleb Fasber, Hamburg; Lewis R. Congleton, Secretary, Hamburg; Theodore Dennis, Attorney.

Four cases of scarlet fever occurred. One meeting was held.

Hopatcong Borough.—MEMBERS AND OFFICERS—Lewis S. Pilcher, M.D., Theo. A. K. Gessler, John Aldred, J. C. Fanger, R. S. Baker, Charles Best, Secretary; James T. Pilcher, Inspector.

Total number of dwellings, 73. Hotels, 4. Two meetings were held.

Montague Township.—MEMBERS AND OFFICERS—Timothy Shay, Hainesville; James H. Dutton, Tri-States, N. Y.; Fred Reinhardt, Port Jervis; George N. Cole, Secretary, Montague; John L. Swayze, Attorney, Newton.

Two meetings were held.

Town of Newton.—MEMBERS AND OFFICERS—Charles H. Hamilton, Charles S. Steel, Lewis J. Martin, Horton H. Beegle, George B. Case, Secretary; I. L. Hallock, Inspector.

Communicable diseases were reported as follows: Diphtheria, 10; scarlet fever, 5; typhoid fever, 12; varioloid, 1. Ten nuisances were abated. Two suits were prosecuted for violation of ordinances. Twelve meetings were held.

Sandyston Township.—MEMBERS AND OFFICERS—Adam Van Sickle, Layton; Wm. Clark, Hainesville; Frank Shay, Layton; M. D. Hughes, M.D., Secretary, Layton; John J. Van Sickle, Registrar, Layton.

Two meetings were held.

Sparta Township.—MEMBERS AND OFFICERS—R. H. Earl, Sparta; L. C. Burd, M.D., Ogdensburg; J. W. Maseker, Secretary, Sparta.

One nuisance was abated. One meeting was held.

SUSSEX COUNTY—*Continued.*

Stillwater Township.—MEMBERS AND OFFICERS—Charles A. Lewis, Stillwater; Wm E. Titman, Swartswood; Charles R. Westbrook, Middleville; Joseph E. Huff, Secretary, Newton, R. F. D., No. 1; A. W. Cassady, M.D., Inspector, Stillwater.

Total number of dwellings, 275. One nuisance was abated. Two meetings were held.

Wantage Township.—MEMBERS AND OFFICERS—R. E. Wilson, Lebens Martin, Irving Brink, William Uright; S. M. Parcell, Secretary, Deckertown; L. J. Martin, Attorney.

Total number of dwellings, 306. One nuisance was abated. One meeting was held.

UNION COUNTY.

Clark Township.—MEMBERS AND OFFICERS—Isaac Terhune, William Smith, Charles Cordes, W. E. Cladek, M.D.; F. P. Bullman, Secretary; F. C. Hyer, Attorney. All of Rahway.

Number of dwellings, 70. Three cases of diphtheria were reported. One meeting was held.

Cranford Township.—MEMBERS AND OFFICERS—J. C. W. Rankin, William F. Hall, G. W. Kime, Dr. J. K. MacConnell; E. S. Crane, Secretary; all of Cranford; Frank Bergen, Attorney, Elizabeth.

Number of dwellings, 630. One case of diphtheria, 6 of scarlet fever, 1 of typhoid fever and 2 of small-pox were reported. Total number of premises connected with sewers, 283. Number connected during past year, 23. Twelve meetings were held.

Elizabeth City.—MEMBERS AND OFFICERS—John W. Whelan, Norton L. Wilson, M.D.; Victor Mravlag, M.D.; Louis Quien, Edward R. O'Reilly, M.D.; James S. Green, M.D.; Arthur Stern, M.D.; James J. Manning, Secretary; Louis J. Richards, Health Officer; Patrick J. Connell, Inspector; James J. O'Brien, Inspector; James C. Connolly, Attorney.

Four hundred and forty-three cases of diphtheria, 146 of scarlet fever, 41 of typhoid fever and 1 of small-pox were reported. Number of nuisances abated, 570. Eleven meetings were held.

UNION COUNTY—*Continued.*

Fanwood Borough.—MEMBERS AND OFFICERS—Dr. F. W. Westcott, F. D. Warren, William E. Gibbs; George F. Carter, Secretary; F. J. Palmer, Inspector.

Total number of dwellings, 70. Five cases of diphtheria, 1 of scarlet fever and 1 of typhoid fever were reported. Seven meetings were held.

Fanwood Township.—MEMBERS AND OFFICERS—Thomas J. Nicholl, Scotch Plains; William H. Terry, Plainfield; Theo. R. Bruchmann, Scotch Plains; Chas. H. French, Secretary, Westfield; F. W. Westcott, M.D., Inspector, Westfield; Wm. R. Codington, Attorney, Plainfield.

Total number of dwellings, 245. Four cases of diphtheria occurred. Five nuisances were abated. Nine meetings were held.

Linden Borough.—MEMBERS AND OFFICERS—H. B. Hardenburg, Wm. McDonagh, H. L. Browning, Jr.; A. E. Knopf, Frank T. Etheridge, D. N. Hetfield, H. D. Huston; R. S. Cole, Secretary; M. C. Loudon, Inspector.

Total number of dwellings, 69. Two nuisances were abated. One meeting was held.

Linden Township.—MEMBERS AND OFFICERS—Walter E. Mitchell, Linden; George McGilvray, Linden; John M. Backman, Linden; Asa E. Collins, Secretary, Linden; D. C. Winans, Inspector, Tremly; H. Page Hough, M.D., Inspector, Rahway; Theo. C. English, Attorney, Elizabeth.

Total number of dwellings, 150. Three cases of scarlet fever were reported. Three nuisances were abated. Three meetings were held.

New Providence Borough.—MEMBERS AND OFFICERS—James G. Alden, Murray Hill; Thomas P. Crane, New Providence; William Woodruff, New Providence; Wilbur F. Brower, West Summit; J. Thomas Scott, Secretary, West Summit; John W. Dickinson, Inspector, New Providence; Frederick H. Leem, Attorney, Chatham.

Total number of dwellings, about 200. Fifteen dwellings are connected with water-mains. One nuisance was abated. Two meetings were held.

New Providence Township.—MEMBERS AND OFFICERS—S. P. Debbie, Scotch Plains; Henry S. Fullerton, Scotch Plains; Victor Mercier, Berkley Heights; W. C. Johnson, Secretary, New Providence; A. M. Cory, M.D., Inspector, New Providence.

Two cases of diphtheria were reported. Four meetings were held.



PLAINFIELD ISOLATION HOSPITAL.

UNION COUNTY—*Continued.*

Plainfield City.—MEMBERS AND OFFICERS—Chas. J. Fisk, Fred. W. Dunn, H. A. Weber, T. S. Davis, M.D.; B. Van D. Hedges, M.D., Secretary; Wm. Addis, Sr., Inspector; Craig A. Marsh, Attorney.

Total number of dwellings, 3,500. Communicable diseases were reported as follows: Diphtheria, 17; scarlet fever, 34; typhoid fever, 27. Number of dwellings connected with water-mains, 1,900, of which number 75 were connected during the past year. Total number of premises connected with sewers, 1,495. Nuisances abated, 189. Fifteen meetings were held.

Rahway City.—MEMBERS AND OFFICERS—C. B. Holmes, M.D.; H. Page Hough, M.D.; W. E. Cladek, M.D.; J. M. Randolph, M.D.; H. W. Gibbons; S. R. Ryno, Secretary; Fred. J. Mix, Inspector.

Two cases of diphtheria, 9 of scarlet fever and 7 of typhoid fever were reported. Nuisances abated, 160. Five meetings were held.

Springfield Township.—MEMBERS AND OFFICERS—A. P. Carter, L. T. Terry, J. L. Denman, J. A. Stites, M.D.; J. J. Hoff, Secretary. All of Springfield.

One case of scarlet fever and 1 of typhoid fever were reported. Two nuisances were abated.

Summit City.—MEMBERS AND OFFICERS—Dr. W. H. Lawrence, Col. A. R. Wallace, Geo. H. Hodenpyt, Francis E. Dana, Wm. H. King; Dr. J. E. Rowe, Secretary; T. J. Scott, Plumbing Inspector; Corra N. Williams, Attorney.

Twenty cases of diphtheria, 9 of scarlet fever and 4 of typhoid fever occurred. Number of nuisances abated, 43. One lawsuit was brought by the board to recover penalty for violation of ordinances. Twelve meetings were held.

Union Township.—MEMBERS AND OFFICERS—D. H. Beach, Union; John H. Doremus, Lyons Farms; Wm. A. Bembridge, Roselle; D. Hobart Sayre, Secretary, Union; N. C. J. English, Attorney, Elizabeth.

Seven cases of diphtheria and 4 of scarlet fever occurred. Four nuisances were abated. Seven meetings were held.

Westfield Township.—MEMBERS AND OFFICERS—J. A. Dennis, Martin Wells, Wm. M. Connolly, Joseph B. Harrison, M.D.; John M. C. Marsh, Secretary; Joseph B. Harrison, Inspector. All of Westfield.

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UNION COUNTY—*Continued.*

Total number of dwellings, 600. Five cases of diphtheria and 2 of small-pox were reported. Number of dwellings connected with water-mains, 550. Premises connected with sewers, 550. Number of nuisances abated, 30. Fifteen meetings were held.

WARREN COUNTY.

Allamuchy Township.—MEMBERS AND OFFICERS—H. H. Miller, Allamuchy; T. G. Dunlap, Allamuchy; Mathias Hibler, Allamuchy; Wm. H. Wilson, Allamuchy; Benj. A. Hendershot, Secretary, Allamuchy; John N. Hibler, Registrar, Tranquility.

Number of dwellings in township, 63. Two cases of diphtheria were reported. Reports of communicable diseases are received and reported by the assessor. One creamery for the distribution of milk is located in the township. No meeting was held by the board during the year.

Belvidere City.—MEMBERS AND OFFICERS—James Belford, Thomas Hayes, G. W. Cummins, Secretary; John King, Inspector.

Five cases of typhoid fever occurred during the year. Sewage is discharged from the city into the Delaware river and Pequest creek. Rubbish and ashes are dumped along the banks of the river. Vaccination of school children has been carried on during the year, and all children in attendance at school will be required to be vaccinated before October 15th. Four regular meetings were held by the board.

Franklin Township.—MEMBERS AND OFFICERS—Frank P. Smith, Broadway; John W. Kline, New Village; Wm. M. Simanten, Asbury; P. G. Creveling, M.D., Broadway; M. B. Bowers, Secretary, Broadway.

Total number of dwellings, 325. Two meetings were held.

Frelinghuysen Township.—MEMBERS AND OFFICERS—George Hibler, Johnsonburg; J. W. Hart, Johnsonburg; Marshall Cook, Hope; W. H. Ackerson, Secretary, Johnsonburg; F. Rorback, M.D., Johnsonburg.

Twenty-six cases of scarlet fever were reported. No meetings were held.

WARREN COUNTY—*Continued.*

Greenwich Township.—MEMBERS AND OFFICERS—C. W. Rush, Stewartsville; B. F. Strader, Philip Hance, F. W. Curtis, M.D.; William Sherrer, Secretary, Bloomsbury.

One case of diphtheria occurred. No meetings were held.

Town of Hackettstown.—MEMBERS AND OFFICERS—William M. Everett, A. E. Martin, M.D.; O. W. Cutler, T. S. White, Alfred Hoffman, R. G. Clark, Thos. Nolan; O. A. Mattison, Secretary; J. M. Everett, Inspector.

Six cases of diphtheria and 1 of scarlet fever occurred. Three nuisances were abated. Seven meetings were held.

Hardwick Township.—No organized board of health. Marcus C. Hill, Assessor, Blairstown.

Harmony Township.—MEMBERS AND OFFICERS—Peter E. Cole, Montana; Irvin B. Smith, Rocksburg; George M. Amey, Harmony; James D. Dewitt, M.D., Harmony; Freeman Schuler, Secretary, Rocksburg; Nicholas Harris, Attorney, Belvidere.

One case of small-pox occurred.

Hope Township.—MEMBERS AND OFFICERS—P. S. Hartung, Hope; D. Walter Storm, Hope; John M. Kostenrader, Delaware; C. H. Cooke, Buttsville; L. C. Fleming, Secretary, Townsbury; R. M. Vanhorn, Attorney, Hope.

One case of scarlet fever was reported. Two meetings were held.

Independence Township.—MEMBERS AND OFFICERS—James F. Johnston, Hackettstown; Aaron B. Leigh, Danville; Silas Cummins, Hackettstown; W. J. Barker, Vienna; F. W. Haggerty, M.D., Secretary, Vienna.

Total number of dwellings, 340. Two meetings were held.

Knowlton Township.—MEMBERS AND OFFICERS—Theodore A. Beck, Hainesburg; Wm. L. Cool, Delaware; Marshall Pittenger, Knowlton; Dr. Bard, Delaware; Wm. B. Moore, Secretary, Columbia; J. M. Rosbery, Attorney, Belvidere.

Total number of dwellings, 360. Two cases of typhoid fever were reported. One nuisance was abated. One meeting was held.

Mansfield Township.—MEMBERS AND OFFICERS—Jacob P. Petty, Port Murray; John Vannatta, Port Murray; Joseph R. Stewart, Rockport; James Beaty, Assessor, Port Murray.

WARREN COUNTY—*Continued.*

Pahaquarry Township.—MEMBERS AND OFFICERS—Hiram Zimmerman, Calno; Oliver Courtright, Calno; Jason K. Hill, Secretary, Millbrook.

Five cases of scarlet fever occurred.

Town of Phillipsburg.—MEMBERS AND OFFICERS—John Greek, P. F. Hagerty, Joseph Pfeiffer, W. Smith, Francis Drake, M.D.; Daniel Zeigler; Frank Kneedler, Secretary; Howard R. Carey, Inspector; B. C. Frost, Attorney.

Communicable diseases were reported as follows: Diphtheria, 38; scarlet fever, 2; typhoid fever, 4. Total number of premises connected with sewers, 124. Sewage is finally discharged into the Delaware river. Number of nuisances abated, 200. One meeting was held.

Pohatcong Township.—MEMBERS AND OFFICERS—Jacob M. Seyler, Finesville; George W. Snyder, Riegelsville; Chas. M. Snyder, Phillipsburg; Wesley B. Laubach, Secretary, Finesville; Jacob O. Boyer, Registrar, Carpenterville; Chas. H. Boyer, Inspector, Riegelsville; I. W. Schultz, Attorney, Phillipsburg.

Total number of dwellings, 610. Two meetings were held.

Washington Borough.—MEMBERS AND OFFICERS—H. M. Cox, M.D.; Chas. M. Williams, M.D.; Daniel V. Wyckoff, John Hambaker, Chas. E. Johnston; A. J. Craft, Secretary; A. J. Bigler, Inspector.

Total number of dwellings, 750. Eleven cases of diphtheria and 3 of scarlet fever occurred. Fifty premises are connected with sewers. Four meetings were held.

Washington Township.—MEMBERS AND OFFICERS—Robert G. Bowes, Washington; Wm. H. Apgar, Port Colden; Wm. Wilbur, Newhampton; Chas. B. Smith, M.D., Washington; Samuel Rinehart, Secretary, Washington.

Total number of dwellings, 295. One nuisance was abated. Two meetings were held.

List of Sanitary Districts, Showing Population and Names and Addresses of Officers.

SANITARY DISTRICT.	COUNTY.	Population by Census of 1900.	NAME AND ADDRESS OF SECRETARY.	NAME AND ADDRESS OF REGISTRAR OF VITAL STATISTICS.
<i>Cities.</i>				
Asbury Park.....	Monmouth.....	4,148	D. C. Bowen.....	D. C. Bowen.
Atlantic City.....	Atlantic.....	27,888	Wm. F. Clark.....	Alfred T. Glenn.
Bayonne.....	Hudson.....	32,722	H. H. Mara.....	
Belvidere.....	Warren.....	1,784	Geo. W. Cummins.....	U. G. Pursell.
Beverly.....	Burlington.....	1,950	B. F. Soby, M.D.....	B. F. Soby, M.D.
Bordentown.....	Burlington.....	4,110	Wm. H. Shippa, M.D.....	H. W. Kunz.
Bridgeton.....	Cumberland.....	13,913	Isaac T. Nichols.....	Frank L. Hewitt.
Burlington.....	Burlington.....	7,392	Wm. M. Jeffries.....	J. F. Cline.
Camden.....	Camden.....	75,935	Eugene B. Roberts.....	H. C. Kramer.
Cape May City.....	Cape May.....	2,257	Lewis T. Stevens.....	John W. Thompson.
Dover.....	Morris.....	6,938	J. H. C. Hunter.....	J. H. C. Hunter.
East Orange.....	Essex.....	21,506	T. N. Gray.....	S. M. Long.
Egg Harbor City.....	Atlantic.....	1,808	V. P. Hofmann.....	V. P. Hoffman.
Elizabeth.....	Union.....	52,130	James J. Manning.....	James J. Manning.
Englewood.....	Bergen.....	6,253	Arthur Galfield.....	Robert Jamieson.
Gloucester City.....	Camden.....	6,840	Daniel F. Lane.....	Daniel F. Lane.
Hackensack.....	Bergen.....	9,443	C. E. Eckerson.....	Cornelius E. Eckerson.
Hoboken.....	Hudson.....	59,364	Joseph Tucker.....	Joseph Tucker.
Jersey City.....	Hudson.....	206,433	C. J. Rooney.....	C. J. Rooney.
Lambertville.....	Hunterdon.....	4,637	James H. Reynolds.....	James H. Reynolds.
Millville.....	Cumberland.....	10,583	L. H. Hogate.....	L. H. Hogate.
Montclair.....	Essex.....	13,992	Richard P. Francis, M.D.....	H. N. Parker.
Morristown.....	Morris.....	11,267	Thomas Martin.....	Thomas Martin.
Newark.....	Essex.....	246,070	D. D. Chandler.....	James F. Connelly.
New Brunswick.....	Middlesex.....	20,008	S. V. D. Clark, M.D.....	George H. Deitzer.
Orange.....	Essex.....	24,141	Wm. Schluer.....	Daniel A. Dugan.
Passaic City.....	Passaic.....	27,777	W. S. Clearwater, Inspector.....	George F. Grear.
Paterson.....	Passaic.....	106,171	James P. McNair.....	John T. Pollitt.
Perth Amboy.....	Middlesex.....	17,699	W. E. Ramsey, M.D.....	John F. Reilley.
Phillipsburg.....	Warren.....	10,052	Frank Kneedler.....	Frank Kneedler.

List of Sanitary Districts, Showing Population and Names and Addresses of Officers—Continued.

SANITARY DISTRICT.	COUNTY.	Population by Census of 1900.	NAME AND ADDRESS OF SECRETARY.	NAME AND ADDRESS OF REGISTRAR & OF VITAL STATISTICS.
<i>Cities—Con.</i>				
Plainfield.....	Union.....	15,369	B. van D. Hedges, M.D.....	H. O. Mattison.
Rahway.....	Union.....	7,935	S. R. Ryno.....	S. R. Ryno.
Salem City.....	Salem.....	5,811	Clinton Bowen.....	Clinton Bowen.
Summit.....	Union.....	5,302	Dr. J. E. Rowe.....	Dr. J. E. Rowe.
Trenton.....	Mercer.....	73,307	Thomas Holmes.....	G. Edward Murray.
Woodbury.....	Gloucester.....	4,087	Arthur Starr.....	Geo. K. Carroll.
<i>Boroughs.</i>				
Allendale.....	Bergen.....	694	J. M. Christopher.....	J. M. Christopher.
Allenhurst.....	Monmouth.....	165	.....	Edward H. Ward.
Allentown.....	Monmouth.....	695	.....	W. R. Forsythe.
Angelsea.....	Cape May.....	161	Geo. W. Dougherty.....	E. M. Shivers.
Atlantic Highlands.....	Monmouth.....	1,383	.....	W. N. Snedeker.
Avalon.....	Cape May.....	93	.....	Walter A. Smith
Avon.....	Monmouth.....	.....	H. M. Dolan.....	Julius Foster.
Bay Head.....	Ocean.....	247	Julius Foster.....	Thomas A. Gavin.
Beach Haven.....	Ocean.....	239	W. F. Beer.....	Chas. O. Hudnut.
Belmar.....	Monmouth.....	932	Charles O. Hudnut.....	John J. Huyler.
Bergen Fields.....	Bergen.....	729	John J. Huyler.....	Harlan P. Ross.
Bogota.....	Bergen.....	337	.....	Chas. McNabb.
Bound Brook.....	Somerset.....	2,622	W. S. Negus.....	A. D. Harvey.
Bradley Beach.....	Monmouth.....	982	Samuel B. Murphy.....	H. N. Kyrner
Branchville.....	Sussex.....	526	.....	James R. Bissex.
Brigantine.....	Atlantic.....	99	James R. Bissex.....	C. A. Decker.
Butler.....	Morris.....	.....	.....	J. J. Van Orden.
Caldwell.....	Essex.....	1,367	Thos. W. Biggs.....	Lafayette Miller.
Cape May Point.....	Cape May.....	153	.....	Herman Foth.
Carlstadt.....	Bergen.....	2,574	Herman Foth.....	D. H. Crawford.
Chatham.....	Morris.....	1,361	D. H. Crawford.....	Albert Ladynski.
Chesilhurst.....	Camden.....	283

LIST OF SANITARY DISTRICTS.

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List of Sanitary Districts, Showing Population and Names and Addresses of Officers—Continued.

SANITARY DISTRICT.	COUNTY.	Population by Census of 1900.	NAME AND ADDRESS OF SECRETARY.	NAME AND ADDRESS OF REGISTRAR OF VITAL STATISTICS.
<i>Boroughs—Con.</i>				
Clayton.....	Gloucester.....	1,951	R. H. Nutt, Cliffside.....	C. F. Fiesler, M.D.
Cliffside Park.....	Bergen.....	968	E. C. Moke.....	Jean Henri Raas, Cliffside.
Clinton.....	Hunterdon.....	816	E. C. Moke.....	Edward C. Moke.
Collingswood.....	Camden.....	1,633	Robert S. Duff.....	Robert S. Duff.
Cresskill.....	Bergen.....	486	John W. Flecke.....	Geo. Y. Allaire.
Deal.....	Monmouth.....	70	E. L. Cowart, Deal Beach.....	F. H. Parcels.
Delford.....	Bergen.....	746	.....	H. A. Bingham, Oradell.
Dumont.....	Bergen.....	643	J. E. Pratt, M.D., Inspector.....	Frank Hill.
Dunellen.....	Middlesex.....	1,239	Wilson S. Frederick.....	Chas. A. Coriell.
East Rutherford.....	Bergen.....	2,640	W. E. Novo.....	Wm. E. Novo, Rutherford.
Edgewater.....	Bergen.....	1,006	Edward Fischer.....	Edward Fischer.
Elmer.....	Salem.....	1,140	.....	Hiram Van Meter.
Englishtown.....	Monmouth.....	410	.....	E. T. Reid.
Englewood Cliffs.....	Bergen.....	218	.....	John G. Ropes, Fort Lee.
Fairview.....	Bergen.....	1,003	G. A. Storms.....	John C. Bush.
Fanwood.....	Union.....	399	Geo. F. Carter.....	Ernest C. Kieb.
Fieldsboro.....	Burlington.....	459	Wm. Leatherbury.....	C. H. Fennimore.
Florham Park.....	Morris.....	752	Henry W. Young.....	Henry W. Young, Afton.
Frenchtown.....	Hunterdon.....	2,934	.....	Wm. R. Shurts
Garfield.....	Bergen.....	3,504	P. J. Scanlon.....	P. J. Scanlon.
Glen Ridge.....	Essex.....	1,960	H. K. Benson.....	Clarence Place.
Glen Rock.....	Bergen.....	613	.....	Wm. H. Berry, Ridgewood.
Haddonfield.....	Camden.....	2,776	Wm. H. Harrison.....	Wm. H. Harrison.
Hasbrouck Heights.....	Bergen.....	1,255	John G. Martin.....	John G. Martin.
Hawthorne.....	Passaic.....	2,096	.....	S. E. Barnes, North Paterson.
Helmetsa.....	Middlesex.....	447	.....	Edward M. Clemens.
High Bridge.....	Hunterdon.....	1,377	Samuel Tate.....	P. H. Murray.
Highlands.....	Monmouth.....	1,223	Silvanos L. Liming.....	Jesse L. Sculthorp.
Hightstown.....	Mercer.....	1,749	.....	Fred. B. Applegate.
Holly Beach.....	Cape May.....	569	Lorenzo C. Johnson.....	H. S. Hewitt.

List of Sanitary Districts, Showing Population and Names and Addresses of Officers—Continued.

SANITARY DISTRICT.	COUNTY.	Population by Census of 1901.	NAME AND ADDRESS OF SECRETARY.	NAME AND ADDRESS OF REGISTRAR OF VITAL STATISTICS.
<i>Boroughs—Con.</i>				
Hopatcong	Sussex.....	980	Charles L. Best	Chas. L. Best, Landing.
Hopewell.....	Mercer.....	316	W. I. Phillips.....	E. V. Savidge.
Island Heights.....	Ocean.....	998	.....	W. T. McKaig.
Junction	Hunterdon	21	.....	E. E. Riddle.
Lavalette	Ocean.....	804	H. M. Thompson	Robert H. Good.
Leesburgh.....	Cumberland.....	402	R. S. Cole	H. M. Thompson.
Leonia	Bergen.....	495	.....	R. S. Cole.
Linden.....	Union.....	1,240	A. W. Woods.....	James Farish.
Linwood	Atlantic.....	1,917	Jacob Van Hook.....	A. Woods.
Little Ferry.....	Bergen.....	8,872	.....	Jacob Van Hook.
Lodi	Bergen.....	80	.....	E. B. Blaisdell.
Long Branch Com.....	Monmouth.....	3,754	.....	Chas. E. Cook.
Longport.....	Atlantic.....	1,500	Ernest Koch	Ernest Koch.
Madison.....	Morris.....	1,511	Wm. A. Rogers	Wm. A. Rogers.
Manasquan	Monmouth	536	Wm. Widnall.....	Wm. Widnall.
Matawan	Monmouth	1,698	Wm. B. Stewart.....	Wm. B. Stewart.
Maywood	Bergen.....	1,786	A. C. Ayres	A. C. Ayres.
Merchamville	Camden.....	1,348	Jacob Leenas, Wortendyke	Timothy Holt
Metuchen	Middlesex.....	200	Wm. H. Polhemus.....	Edward T. Wright.
Midland Park	Bergen.....	561	F. E. Riva, M.D., Inspector	Robert A. Harkins.
Millstone.....	Somerset	416	Eugene Malcherbe, President	Paul Pratt.
Milltown	Middlesex.....	270	F. H. Tappen	Cyrus E. Cook.
Montvale	Bergen.....	367	.....	Chas. W. Schoonoven.
Mount Arlington.....	Morris.....	1,009	T. A. Lowe, Jersey City	Whitfield Smith, Avon.
Mountain Side.....	Union.....	941	Whitfield Smith.....	Frank King, Nutley.
Mount Tabor	Morris.....	565	J. Thomas Scott, West Summit	J. Thomas Scott
Neptune City	Monmouth	297	.....	Fred. L. Baldwin, Caldwell.
Netcong	Morris.....
New Providence	Union.....
North Caldwell.....	Essex.....

LIST OF SANITARY DISTRICTS.

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List of Sanitary Districts, Showing Population and Names and Addresses of Officers—Continued.

SANITARY DISTRICT.	COUNTY.	Population by Census of 1900.	NAME AND ADDRESS OF SECRETARY.	NAME AND ADDRESS OF REGISTRAR OF VITAL STATISTICS.
<i>Boroughs—Con.</i>				
North Haledon.....	Passaic.....	5,009	Rev. W. E. Honeyman.....	Adolph Kramer, Haledon.
North Plainfield.....	Somerset.....	361	.....	Rev. W. E. Honeyman, Plainfield.
North Spring Lake.....	Monmouth.....	.....	.....	F. M. Hunt.
Nutley.....	Essex.....	1,307	Luther L. Wallace.....	Henry M. Whitfield.
Ocean City.....	Cape May.....	.....	H. B. Alday, M. D.....	T. Lee Adams.
Ocean Grove Association.	Monmouth.....	269	R. B. Haring.....	R. B. Haring, Tappan, N. Y.
Old Tappan.....	Bergen.....	644	M. E. Jenkins.....	M. E. Jenkins.
Palisades Park.....	Bergen.....	870	E. W. Landes.....	Martin Brunings.
Park Ridge.....	Bergen.....	771	John H. Antrim.....	John H. Antrim.
Pemberton.....	Burlington.....	733	Jos. C. Bunn.....	Joseph C. Bunn.
Pennington.....	Mercer.....	1,826	Henry M. Flanagan, M. D., Sec'y.....	H. M. Flanagan, M. D.
Pennsgrove.....	Salem.....	2,182	Wilbur Reed.....	Wilbur Reed.
Pleasantville.....	Atlantic.....	.....	.....	.....
Point Pleasant.....	Ocean.....	746	W. E. Pearce.....	H. F. Egbert, Point Pleasant.
Point Pleasant Beach.....	Ocean.....	847	.....	H. M. Wells.
Pompton Lakes.....	Passaic.....	3,899	.....	M. W. Hubbard.
Princeton.....	Mercer.....	.....	Thos. Fraser.....	Jacob Doele, 256 N. Seventh street.
Prospect Park.....	Passaic.....	3,244	Wm. Kilger.....	Wm. Kilger.
Raritan.....	Somerset.....	584	B. F. Underwood.....	B. F. Underwood.
Ridgefield.....	Bergen.....	561	Wm. W. Herrick, River Edge.....	J. H. Weston, Cherry Hill.
Riverside.....	Bergen.....	1,332	Alex. Marcy, Jr.....	Jacob G. Cottrell.
Riverton.....	Burlington.....	1,483	Wm. May.....	Wm. A. Parliman.
Rockaway.....	Morris.....	354	.....	A. C. Skirm.
Rocky Hill.....	Somerset.....	1,652	.....	G. A. Rawlins.
Roselle.....	Union.....	4,415	P. H. Maison.....	Oscar T. Peck, Roselle.
Roselle Park.....	Union.....	416	Isaac A. Hopper, Fair Lawn.....	Chas. Van Winkle.
Rutherford.....	Bergen.....	1,198	.....	T. Nelson Woodruff.
Saddle River.....	Bergen.....	.....	Henry A. De Roche.....	F. J. Heial, Jr.
Southbright.....	Monmouth.....	340	.....	Henry O. De Roder.
New Fair City.....	Cape May.....	.....	.....	.....

List of Sanitary Districts, Showing Population and Names and Addresses of Officers—Continued.

SANITARY DISTRICT.	COUNTY.	Population by Census of 1900.	NAME AND ADDRESS OF SECRETARY.	NAME AND ADDRESS OF REGISTRAR OF VITAL STATISTICS.
<i>Boroughs—Con.</i>				
Seaside Park	Ocean	73	Frank Eckardt	Winfield R. Fox.
Secaucus	Hudson	1,626	Frank Eckardt	Joseph F. Fulton.
Somers Point	Atlantic	308	Jos. F. Fulton	Chas. Hart.
South Amboy	Middlesex	6,349	Chas. Hart	
South Atlantic City	Atlantic	69		
South Bound Brook	Somerset	883		
South Cape May	Cumberland	14		
South River	Middlesex	2,792	R. Van Dyke Reid	J. Conover Bowne.
Spring Lake Beach	Monmouth	526	E. H. Newman	E. H. Newman.
Stockton	Hunterdon	590	John S. Wilson	John S. Wilson.
Sussex	Sussex	1,306		F. B. Whittle.
Tenally	Bergen	1,746	Fred. L. Colver	J. B. W. Lansing, M.D.
Totowa	Passaic	562	Wilbur De Mott	John L. Ochs, Paterson.
Tuckerton	Ocean			J. Louis Lane.
Upper Saddle River	Bergen	326	Henry Zabriskie, Saddle River	A. A. Zabriskie, Saddle River.
Vailsburg	Essex	2,779	Robert A. Glover	Wm. Billington.
Vineland	Bergen	4,370	J. H. Prince	J. H. Prince.
Wallington	Bergen	1,812		James Brennan, Carlton Hill.
Washington	Warren	3,580	A. J. Craft	A. J. Craft.
Wenonah	Gloucester	498	Jesse W. English	Jesse W. English.
West Cape May	Cape May	696	A. G. Stevens, M.D.	Theodore Reeves, Eldredge.
Westwood	Bergen	828		John E. Haring.
Wharton	Morris	2,069		W. J. Chedwidden.
Wildwood	Cape May	150	Nelson S. Hays	Wm. R. Cills.
Woodclife	Bergen	329	G. J. Wortendyke	G. J. Wortendyke.
Wood Lynne	Camden		Chas. F. Cosgrove	Chas. F. Cosgrove.
Wood Ridge	Bergen	582	Wm. H. White	Wm. H. White.
Woodstown	Salem	1,371		H. H. Stepler.

List of Sanitary Districts, Showing Population and Names and Addresses of Officers—Continued.

SANITARY DISTRICT.	COUNTY.	Population by Census of 1900.	NAME AND ADDRESS OF SECRETARY.	NAME AND ADDRESS OF REGISTRAR OF VITAL STATISTICS.
<i>Towns.</i>				
Abecon.....	Atlantic.....	530	Geo. B. Lutta.....	George B. Lutta.
Bloomfield.....	Essex.....	9,668	Wm. L. Johnson.....	Wm. L. Johnson.
Boutton.....	Morris.....	3,901	M. L. Brower.....	G. E. Fisher.
Freehold.....	Monmouth.....	2,934	J. O. Burt.....	Rulif V. Lawrence.
Guttenberg.....	Hudson.....	3,825	.....	.....
Hackettstown.....	Warren.....	2,474	Frank P. Titus.....	Frank P. Titus.
Hamonton.....	Atlantic.....	3,431	J. Louis O'Donnell.....	J. Louis O'Donnell.
Harrison.....	Hudson.....	10,596	John J. Scannell.....	.....
Irrington.....	Essex.....	5,255	Edwin Berry.....	Mahlon Stockman.
Kearny.....	Hudson.....	10,896	Joseph Smith.....	Albert Geissler.
Keyport.....	Monmouth.....	3,413	D. E. Roberts, M.D.....	.....
Red Bank.....	Monmouth.....	5,428	Henry J. Child.....	Henry J. Child.
Somerville.....	Somerset.....	4,843	Wm. R. Sutphen.....	W. R. Sutphen.
Town of Union.....	Hudson.....	15,187	.....	.....
West Hoboken.....	Hudson.....	23,094	W. Percival Fisk.....	.....
West New York.....	Hudson.....	5,267	Wm. Meckbeck.....	.....
<i>Villages.</i>				
Ridgefield Park.....	Bergen.....	.....	Edgar T. Bonds.....	.....
Ridgewood.....	Bergen.....	2,685	J. Blauvelt Hopper.....	Thomas Terhune, Hohokus.
South Orange.....	Essex.....	4,608	Richard D. Freeman, M.D.....	W. W. Heberton, M.D.
<i>Townships.</i>				
Acquackanonk.....	Passaic.....	5,351	Richard Berry.....	Richard Berry, Clifton.
Alexandria.....	Hunterdon.....	1,045	Robert Roseberry.....	Robert Roseberry, Little York.
Allamuchy.....	Warren.....	588	Benj. A. Hendershot, Allamuchy.....	E. J. Harden, Allamuchy.
Alloway.....	Salem.....	1,328	Wm. E. Simpkins.....	Wm. E. Simpkins, Aldine.
Andover.....	Sussex.....	987	Wm. Iliff.....	Wm. Iliff, Newton.
Atlantic.....	Monmouth.....	1,410	Levi Scobey.....	Levi Scobey, Scobeyville.
Bass River.....	Burlington.....	300	M. C. Mathia.....	M. C. Mathia, New Gretna.

List of Sanitary Districts, Showing Population and Names and Addresses of Officers—Continued.

SANITARY DISTRICT.	COUNTY.	Population by Census of 1900.	NAME AND ADDRESS OF SECRETARY.	NAME AND ADDRESS OF REGISTRAR OF VITAL STATISTICS.
<i>Townships—Con.</i>				
Bedminster.....	Somerset	1,925	W. D. Vanderbeck.....	W. D. Vanderbeck, Gladstone.
Belleville.....	Essex	5,907	Wm. Connolly.....	Wm. Connolly, Belleville.
Berkley.....	Ocean	694	M. B. Allen, Bayville.....	Devine Butler, Bayville.
Bernards	Somerset	3,066	S. S. Baldwin.....	S. S. Baldwin, Liberty Corner.
Bethlehem.....	Hunterdon	1,634	S. O. Myers.....	S. O. Myers, Bloomsbury.
Beverly	Burlington	1,804	Joseph B. Carter, Delanco.	Joseph B. Carter, Delanco.
Blairstown.....	Warren	1,576	.....	Wm S. Perry, Knowlton.
Boonton.....	Morris	709	.....	Joseph Steventon, Boonton.
Bordentown.....	Burlington	488	Milton R. Cox, Bordentown .....	.....
Burlington	Burlington	1,061	.....	Thomas B. Gandy, Burlington.
Branchburg	Somerset	1,012	.....	Lester Shurts, Neshanic Station.
Brick	Ocean	2,130	Geo. W. Van Nott, Burrsville.....	J. H. Harvey, Point Pleasant.
Bridgewater.....	Somerset	1,601	C. L. Voorhees	Chas. L. Voorhees, Somerville.
Byram	Sussex	1,235	E. O. Valentine.....	E. O. Valentine, Stanhope.
Buena Vista	Atlantic	1,646	Douglas Reed, Buena	Alfred Pennock, Buena
Caldwell.....	Essex	1,619	Theodore Vincent.....	Theodore Vincent, Caldwell.
Centre	Camden.....	2,192	John H. Jackson.....	John H. Jackson, Magnolia.
Chatham	Morris	620	.....	I. H. Bebout, New Providence.
Chester.....	Burlington	4,420	.....	Benjamin Rogers, Moorestown.
Chester	Morris	1,409	.....	John M. Frost, Chester.
Chesterfield.....	Burlington	1,143	Chas. B. Holloway.....	Chas. B. Holloway, Chesterfield.
Cinnaminson.....	Burlington	1,078	Timothy Morton.....	Timothy Morton, Farry.
Clark	Union	374	F. P. Bullman	F. P. Bullman, Picton.
Clayton.....	Gloucester.....	88	.....	.....
Clinton.....	Essex	1,325	W. H. Goldsmith	Wm. H. Goldsmith, Lyons Farms.
Clinton.....	Hunterdon	2,296	Bergen B. Berkaw	Bergen B. Berkaw, Annandale.
Commercial	Cumberland.....	2,982	.....	E. J. Cook, Port Norris.
Cranbury.....	Middlesex.....	1,428	A. M. Davison.....	Ancil M. Davison, Cranbury.
Cranford.....	Union.....	2,854	Edward S. Crane.....	Edward S. Crane, Cranford.
Deerfield.....	Cumberland.....	3,066	Dr. Chas. C. Phillips, Deerfield Station..	Elijah R. Parvin, Deerfield Station.

List of Sanitary Districts, Showing Population and Names and Addresses of Officers—Continued.

SANITARY DISTRICT.	COUNTY.	Population by Census of 1900.	NAME AND ADDRESS OF SECRETARY.	NAME AND ADDRESS OF REGISTRAR OF VITAL STATISTICS.
<i>Townships—Con.</i>				
Delaware.....	Camden.....	1,679	W. B. Jennings, M.D., Haddonfield.....	Wm. Graff, Haddonfield.
Delaware.....	Hunterdon.....	1,953	F. W. Venable.....	F. W. Venable, Sergeantville.
Delran.....	Burlington.....	890	Daniel A. Kendall.....	Daniel A. Kendall, Riverton.
Dennis.....	Cape May.....	2,778	.....	Leaming M. Rice, Jr., Dennisville.
Deptford.....	Gloucester.....	2,114	Wm. C. Cattell.....	Wm. C. Cattell, Wenonah.
Dover.....	Ocean.....	2,618	.....	Peter Tilton, Toms River.
Downe.....	Cumberland.....	1,833	Geo. E. Butcher, Dividing Creek.....	Eugene F. Cranmer, West Creek.
Eagleswood.....	Ocean.....	563	.....	Chas. H. Dennis, Jr., Smithville.
Eastampton.....	Burlington.....	584	Chas. H. Dennis.....	Wm. M. Claylunce, Wertsville.
East Amwell.....	Hunterdon.....	1,327	.....	Henry Warnsdorfer, New Brunswick.
East Brunswick.....	Middlesex.....	2,423	.....	Walter Heritage, Swedesboro.
East Greenwich.....	Gloucester.....	1,323	Walter Heritage.....	S. L. Mount, Etra.
East Windsor.....	Mercer.....	894	S. L. Mount.....	A. L. Scooby, Eatontown.
Eatontown.....	Monmouth.....	3,021	.....	A. R. Vickers, Bakerville.
Egg Harbor.....	Atlantic.....	1,867	A. R. Vickers.....	Kinsey Morgan, Hardingville.
Elk.....	Gloucester.....	997	.....	Chas. P. Farnkoff, Salem.
Elsinboro.....	Salem.....	445	Chas. P. Farnkoff.....	Samuel D. Farrow, Marlton.
Evesham.....	Burlington.....	1,429	P. V. B. Stroud, M.D., Marlton.....	W. H. Cadwallader, Trenton.
Ewing.....	Mercer.....	1,333	J. M. Matthews, Trenton, Box 676.....	James B. Mulford, Fairton.
Fairfield.....	Cumberland.....	1,911	E. H. Whiticar, Fairton.....	Chas. H. French, Westfield.
Fanwood.....	Union.....	1,200	Chas. H. French.....	Byron Cary, Florence.
Florence.....	Burlington.....	1,955	Walter Scully, Florence.....	H. N. Kyrner, Branchville.
Frankford.....	Sussex.....	932	.....	John W. Ackerman, Wyckoff.
Franklin.....	Bergen.....	2,139	John W. Ackerman.....	H. C. Richman, Malaga.
Franklin.....	Gloucester.....	2,252	H. C. Richman.....	J. L. Agans, Pittstown.
Franklin.....	Hunterdon.....	1,258	J. L. Agans.....	L. J. Suydam, New Brunswick, R. F. D., No. 5.
Franklin.....	Somerset.....	2,398	L. J. Suydam.....	P. B. Butterwick, Asbury.
Franklin.....	Warren.....	1,280	M. B. Bowers, Broadway.....	
Freehold.....	Monmouth.....	2,234	Ruliff V. Lawrence, Freehold.....	

List of Sanitary Districts, Showing Population and Names and Addresses of Officers—Continued.

SANITARY DISTRICT.	COUNTY.	Population by Census of 1900.	NAME AND ADDRESS OF SECRETARY.	NAME AND ADDRESS OF REGISTRAR OF VITAL STATISTICS.
<i>Townships—Con.</i>				
Frelinghuysen.....	Warren.....	797	W. H. Ackerson.....	Walter H. Ackerson, Johnsonburg.
Galloway.....	Atlantic.....	2,469	Anthony Kienale, Egg Harbor City.....	Jos. Nehr, Cologne.
Glassboro.....	Gloucester.....	2,677	David Paulin.....	David Paulin, Glassboro.
Gloucester.....	Camden.....	4,018	Willard T. Gibbs.....	Willard T. Gibbs, Clementon.
Green.....	Sussex.....	627	M. W. Northup.....	M. W. Northup, Huntville.
Greenwich.....	Cumberland.....	1,283	J. W. Butler.....	J. W. Butler, Othello.
Greenwich.....	Gloucester.....	2,252	William Sherrer.....	Jacob Ballinger, Paulsboro.
Greenwich.....	Warren.....	909	William Sherrer.....	Wm. Sherrer, Bloomsbury.
Haddon.....	Camden.....	2,012	James Macaulay.....	James Macaulay, Westmont.
Hamilton.....	Atlantic.....	1,682	Edward Hazelton, Mays Landing.....	Joseph Hammill, Mays Landing.
Hamilton.....	Mercer.....	4,164	Azariah Cudberly, Hamilton Square.....	R. E. Haines, Hamilton Square.
Hampton.....	Sussex.....	775	Frank Emmons.....	Frank Emmons, Newton.
Hanover.....	Morris.....	5,366	Marcus C. Hill.....	Joseph H. Bastedo, Boonton.
Hardwick.....	Warren.....	400	Marcus C. Hill.....	Marcus C. Hill, Blairstown.
Hardyston.....	Sussex.....	3,425	Lewis R. Congleton.....	Lewis R. Congleton, Hamburg.
Harmony.....	Warren.....	1,080	Freeman Schluer.....	Freeman Schluer, Rocksburg.
Harrington.....	Bergen.....	3,224	Wm. J. Demarest.....	Wm. J. Demarest, Norwood.
Harrison.....	Gloucester.....	1,569	Eli Heritage.....	Eli Heritage, Richwood.
Hillsborough.....	Somerset.....	2,439	Joseph H. Van Cleef, Millstone.....	Jos. H. Van Cleef, Millstone.
Hillsdale.....	Bergen.....	891	John Ackerman.....	C. H. De Vos, Leonia.
Hobokus.....	Bergen.....	2,610	John Ackerman.....	John Ackerman, Wyckoff.
Holland.....	Hunterdon.....	1,652	Godfrey Hawk.....	Godfrey Hawk, Bloomsbury.
Holmdel.....	Monmouth.....	1,190	Aaron Longstreet.....	Aaron Longstreet, Keyport.
Hope.....	Warren.....	1,144	L. C. Fleming.....	L. C. Fleming, Townsbury.
Hopewell.....	Cumberland.....	1,807	Walter L. Minch.....	Walter L. Minch, Shiloh.
Hopewell.....	Mercer.....	3,360	Arthur T. Blackwell.....	A. T. Blackwell, Harborton.
Howell.....	Monmouth.....	1,190	James H. Butcher.....	James H. Butcher, Ardenna.
Hudson County.....	Hudson.....	386,048	C. J. Rooney.....	C. J. Rooney, Jersey City.
Independence.....	Warren.....	805	F. M. Haggerty, M. D., Vienna.....	Wm. J. Barker, Vienna.
Jackson.....				Walter S. Hendrickson, Jackson's Mill.

List of Sanitary Districts, Showing Population and Names and Addresses of Officers—Continued.

SANITARY DISTRICT.	COUNTY.	Population by Census of 1900.	NAME AND ADDRESS OF SECRETARY.	NAME AND ADDRESS OF REGISTRAR OF VITAL STATISTICS.
<i>Townships—Con.</i>				
Jefferson.....	Morris.....	1,341	.....	Chas. Chamberlain, Woodport.
Kingwood.....	Hunterdon.....	1,304	Samuel S. Snyder.....	Samuel S. Snyder, Locktown.
Knokton.....	Warren.....	1,210	Wm. B. Moore.....	Wm. B. Moore, Columbia
Lacey.....	Ocean.....	718	B. F. Mathews.....	B. F. Mathews, Forked River.
Lafayette.....	Sussex.....	717	.....	J. C. Strader, M.D., Lafayette.
Lakewood.....	Ocean.....	3,094	Alex. M. Manolt, Lakewood.....	R. R. Robbins, Lakewood.
Landis.....	Cumberland.....	4,721	Howard M. Dolbey.....	Howard M. Dolby, Vineland.
Lawrence.....	Cumberland.....	1,658	Henry S. Long, Cedarville.....	Furman B. Sheppard, Cedarville.
Lawrence.....	Mercer.....	1,555	Frank Pierson.....	Frank Pierson, Lawrenceville.
Lebanon.....	Hunterdon.....	2,253	A. S. Banghart.....	A. S. Banghart, Glen Gardner.
Linden.....	Union.....	619	Asa E. Collins.....	Asa E. Collins, Linden.
Little Egg Harbor.....	Ocean.....	1,856	J. L. Lane, M.D., Tuckerton.....	William Speck, Tuckerton.
Little Falls.....	Passaic.....	2,908	B. A. Stanley.....	B. A. Stanley, Little Falls.
Livingstone.....	Essex.....	1,412	David Flynn.....	David Flynn, Livingston.
Lodi.....	Bergen.....	448	Julius Pries.....	Julius Pries, Wood Ridge.
Logan.....	Gloucester.....	1,444	S. B. Platt.....	S. B. Platt, Bridgeport.
Long Beach.....	Ocean.....	152	.....	A. W. Brown, Manahawkin.
Lopatcong.....	Warren.....	1,962	.....	E. Frank Cline, Shimers.
Lower Alloways Creek ..	Salem.....	1,242	.....	Richard Grier, Salem.
Lower.....	Cape May.....	1,141	.....	A. B. Walter, Cape May.
Lower Penns Neck.....	Salem.....	1,424	.....	John G. Mitchell, Pennsville.
Lumberton.....	Burlington.....	1,624	.....	H. D. Culin, Hainesport.
Madison.....	Middlesex.....	1,671	D. H. Brown.....	D. H. Brown, Brownstown.
Manalapan.....	Monmouth.....	1,435	S. C. Bowne.....	Samuel C. Bowne, Tennent.
Manchester.....	Ocean.....	1,033	W. A. Larrabee.....	W. A. Larrabee, Lakehurst.
Manchester.....	Passaic.....	3,989	Chas. H. Banta.....	Chas. H. Banta, Haledon.
Mannington.....	Salem.....	1,745	.....	Henry B. Richman, Sharptown.
Mansfield.....	Burlington.....	1,518	James Beatty.....	E. D. Erhart, Columbus.
Mansfield.....	Warren.....	1,324	George B. Hurff.....	James Beatty, Port Murray.
Manthua.....	Gloucester.....	2,101	.....	George B. Hurff, Sewell.

List of Sanitary Districts, Showing Population and Names and Addresses of Officers—Continued.

SANITARY DISTRICT.	COUNTY.	Population by Census of 1900.	NAME AND ADDRESS OF SECRETARY.	NAME AND ADDRESS OF REGISTRAR OF VITAL STATISTICS.
<i>Townships—Con.</i>				
Marlboro	Monmouth	1,747	Chris. Winters	W. F. Nivison, Morganville.
Matawan	Monmouth	1,310	Chris. Winters	Chris. Winter, Cliffwood.
Maurice River	Cumberland	2,132	Henry Reeves, Jr.	Henry Reeves, Jr., Leesburg.
Medford	Burlington	1,969	Wm. M. Potts	Wm. M. Potts, Medford.
Mendham	Morris	1,600	John D. Lindsley	John D. Lindsley, Mendham.
Middle	Cape May	2,191	Stillwell H. Townsend ..	Stillwell H. Townsend, Cape May C. H.
Middletown	Monmouth	5,479	Omar Sickles	Omar Sickles, Navesink.
Midland	Bergen	1,298	John D. Bogert	John D. Bogert, Ridgewood.
Millburn	Essex	2,837	John M. Drake	John M. Drake, Millburn.
Millstone	Monmouth	1,609	Geo. J. Ely	George J. Ely, Perrineville.
Monroe	Gloucester	2,402	Clayton B. Tice	Clayton B. Tice, Williamstown.
Montague	Middlesex	1,899	R. R. Vandenberg	Robert B. Vandenberg, Prospect Plains.
Montgomery	Sussex	710	Geo. N. Cole	George N. Cole, Montague.
Montville	Somerset	1,243	Geo. W. Campbell, Griggstown	C. B. Allhouse, Harlingen.
Morris	Morris	1,908	.....	Asa T. Cook, Montville.
Mount Laurel	Morris	2,571	.....	C. M. Phillips, Morristown.
Mumt Olive	Burlington	1,644	Wm. P. Lippincott	Wm. P. Lippincott, Hartford.
Mullica	Morris	1,221	S. W. Salmon	S. W. Salmon, Mt. Olive.
Neptune	Atlantic	880	John T. Irving, Elwood	W. W. Phillips, Elwood.
New Barbadoes	Monmouth	7,943	.....	Wm. R. O'Brien, Asbury Park.
New Hanover	Bergen	.....	.....	.....
New Providence	Union	1,927	.....	Benjamin Romine, Wrightstown.
Newton	Burlington	469	W. C. Johnson	W. C. Johnson, New Providence.
Northampton	Sussex	4,376	Geo. B. Case	George B. Case, Newton.
North Bergen	Burlington	5,168	M. H. Girvin	Martin H. Girvin, Mt. Holly.
North Brunswick	Hudson	9,213	Emil J. Foersch, New Durham ..	.....
North Plainfield	Middlesex	847	A. E. Bowman, E. F. D., No. 4	A. E. Bowman, New Brunswick.
Ocean	Somerset	654	Wm. H. Morris	W. H. Morris, Dunellen.
.....	Ocean	436	J. H. Wilkins	Jonathan H. Wilkins, Wardtown.
.....	Monmouth	4,251	Howard A. Brinley, Long Branch.

LIST OF SANITARY DISTRICTS.

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SANITARY DISTRICT.	COUNTY.	Population by Census of 1900.	NAME AND ADDRESS OF SECRETARY.	NAME AND ADDRESS OF REGISTRAR OF VITAL STATISTICS.
<i>Townships—Con.</i>				
Oldmans.....	Salem.....	1,382	Levi C. Justice.....	Levi C. Justice, Pedricktown.
Orvil.....	Bergen.....	1,207	J. B. Ver Nooy.....	J. B. Ver Nooy, Waldwick.
Overpeck.....	Bergen.....	1,987	.....	S. A. Wicox, Ridgefield Park.
Oxford.....	Warren.....	3,095	.....	Edward Parcell, Buttsville.
Pahaquarry..	Warren.....	257	Jason K. Hill.....	Jason K. Hill, Millbrook.
Palisade.....	Bergen.....	860	Wm. Ely.....	Wm. Ely, New Bridge.
Palmyra.....	Burlington	2,300	.....	F. Blackburn, Palmyra.
Passaic.....	Morris.....	2,411	.....	J. A. Harvey, Stirling.
Pemberton.....	Burlington	1,493	.....	Barclay Seeds, Pemberton.
Pensauken.....	Camden.....	3,145	.....	Harry E. Horner, Merchantville.
Pequanook.....	Morris.....	3,250	Chas. D. Decker, Butler.....	Wm. H. Beam, Pompton Plains.
Pilesgrove.....	Salem.....	1,744	D. F. Davis.....	David F. Davis, Woodstown.
Piscataway.....	Middlesex.....	2,628	Chas. E. Kelly.....	Chas. E. Kelly, New Market.
Pittsgrove.....	Salem.....	2,092	.....	George Schalick, Centreton.
Pohatcong.....	Warren.....	2,215	Wesley B. Lauback, Finesville.....	Jacob O. Boyer, Carpentersville.
Plumstead.....	Ocean.....	1,204	Daniel W. Bussom.....	Daniel W. Bussom, New Egypt.
Pompton.....	Passaic.....	2,404	D. Reeve Sloan, Bloomingdale.....	David Beam, Midvale.
Princeton.....	Mercer.....	955	H. N. Van Dyke.....	H. N. Van Dyke, Princeton.
Quinton.....	Salem.....	1,280	.....	Josiah T. Harris, Quinton.
Randolph.....	Morris.....	2,246	T. O. Bassett, Dover.....	D. H. Dalrymple, Dover.
Raritan.....	Hunterdon	4,037	.....	Chas. Alpaugh, Flemington.
Raritan.....	Middlesex.....	2,801	Wm. T. Woerner.....	Wm. T. Woerner, New Brunswick.
Raritan.....	Monmouth.....	1,524	John H. Fitzgerald, Keyport.....	W. C. Smith, Keyport.
Readington.....	Hunterdon	2,670	David Schomp.....	David Schomp, Pleasant Run.
Ridgefield.....	Bergen.....	2,612	Thomas F. Mallon.....	Thomas F. Mallon, Fort Lee.
Rockaway.....	Morris.....	4,528	David A. Wiggins.....	David A. Wiggins, Rockaway.
Roxbury.....	Morris.....	2,185	E. N. Corwin.....	Edgar N. Corwin, Succasunna.
Saddle River.....	Bergen.....	1,954	Isaac A. Hopper.....	Isaac A. Hopper, Fair Lawn.
Sandyston.....	Sussex.....	939	M. D. Hughes, M.D., Layton.....	John J. Van Sickle, Layton.
Sayreville.....	Middlesex.....	4,155	B. F. Samsel.....	B. F. Samsel, Sayreville.

List of Sanitary Districts, Showing Population and Names and Addresses of Officers—Continued.

SANITARY DISTRICT.	COUNTY.	Population by Census of 1900.	NAME AND ADDRESS OF SECRETARY.	NAME AND ADDRESS OF REGISTRAR OF VITAL STATISTICS.
<i>Townships—Con.</i>				
Shamong	Burlington	910	.....	James K. Naylor, Oriental.
Shrewsbury	Monmouth	3,842	A. C. Harrison, Red Bank	Albert L. Ivins, Red Bank.
Southampton	Burlington	1,904	.....	Lewis S. Brown, Vincentown.
South Brunswick	Middlesex	2,337	.....	H. E. Hathaway, Monmouth Junction.
South Harrison	Gloucester	706	Samuel F. Stanger, Harrisonville	D. C. Lippincott, Harrisonville.
South Orange	Essex	1,630	Theo. C. Baker	Theodore C. Baker, Maplewood.
Sparta	Sussex	2,070	John W. Maseker	John W. Maseker, Sparta.
Springfield	Burlington	1,382	Theo. F. Wright	Theodore F. Wright, Jobstown.
Springfield	Union	1,073	J. J. Hoff	J. J. Hoff, Springfield.
Stafford	Ocean	1,009	John B. Courtney	John B. Courtney, Manahawkin.
Stillwater	Sussex	1,108	Jos. E. Huff, R. F. D., No. 1	Joseph E. Huff, Newton.
Stoe Creek	Cumberland	934	Reuben A. Fogg	R. A. Fogg, Shiloh.
Tabernacle	Burlington	768	Jonathan Hawkins	Geo. H. Wisham, Vincentown.
Teaneck	Bergen	1,883	H. S. Potter	Jonathan Hawkins, Englewood.
Tewksbury	Bergen	1,590	.....	H. S. Potter, Pottersville.
Union	Hudson .....	.....	.....	Thomas E. Buckley, Kingsland.
Union	Hunterdon	918	John Little	John Little, Jutland.
Union	Ocean	955	.....	Wm. A. Jones, Barnegat.
Union	Union	4,315	D. Hobart Sayre	D. Hobart Sayre, Union.
Upper Freehold	Monmouth	2,112	F. C. Price, M.D., Imbstown	Wm. Quicksall, Hornerstown.
Upper Penns Neck	Salem	775	Geo. W. Hewitt	George W. Hewitt, Pennsgrove.
Upper Pittsgrove	Salem	1,725	R. A. Robinson	R. A. Robinson, Monroeville.
Upper	Cape May	1,351	Jesse T. Young, Beesley's Point	R. Fendall Smith, Marmora.
Vernon	Sussex	1,738	.....	A. E. Rutherford, Vernon.
Verona	Essex	2,139	.....	A. E. Hedden, Verona.
Voorhees	Camden	969	S. H. Gardiner	S. H. Gardiner, Ashland.
Wall	Monmouth	3,212	Geo. E. Rogers	George E. Rogers, New Bedford.
Walpack	Sussex	371	.....	Cornelius D. Gunn, Walpack Centre.
Wantage	Sussex	2,217	S. M. Purcell	S. M. Purcell, Sussex.

LIST OF SANITARY DISTRICTS.

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List of Sanitary Districts, Showing Population and Names and Addresses of Officers—Continued.

SANITARY DISTRICT.	COUNTY.	Population by Census of 1900.	NAME AND ADDRESS OF SECRETARY.	NAME AND ADDRESS OF REGISTRAR OF VITAL STATISTICS.
<i>Townships—Con.</i>				
Warren	Somerset	1,008	Peter Newmiller	Peter Newmiller, Warrenville.
Washington	Bergen	782	Nicholas Cleveland	N. Cleveland, Westwood.
Washington	Burlington	617	Walter S. Sooy	Walter S. Sooy, Green Bank.
Washington	Gloucester	1,252	C. D. Nicholson	Chas. D. Nicholson, Turnersville.
Washington	Mercer	1,157	E. K. Cole	E. K. Cole, Windsor.
Washington	Morris	2,220	.....	George H. Sliker, Pleasant Grove.
Washington	Warren	1,249	Samuel Rhinehart	Samuel Rhinehart, Washington.
Waterford	Camden	2,161	H. N. Gillon, Berlin	Charles D. Heath, Berlin.
Wayne	Passaic	1,985	.....	Wm. Wilkins, Singac.
Weehawken	Hudson	5,325	.....	.....
Westampton	Burlington	567	Hudson B. Haines	Hudson B. Haines, Rancocas.
West Amwell	Hunterdon	839	.....	George H. Carr, Lambertville.
West Deptford	Gloucester	1,951	James Carter	James Carter, Thorofare.
Westfield	Union	4,328	John M. C. Marsh	John M. C. Marsh, Westfield.
West Milford	Passaic	2,112	Joseph Tindle Echo Lake	Celestine Schulster, Echo Lake.
West Orange	Essex	6,889	Albert Wrensch, West Orange	B. L. Williams, West Orange.
West Windsor	Mercer	1,279	C. H. Mather	C. H. Mather, Lawrence Station.
Weymouth	Atlantic	972	P. W. Flanagan	Providence W. Flanagan, Tuckahoe.
Willingboro	Burlington	673	.....	James M. Stokes, Rancocas.
Winslow	Camden	2,392	Michael G. Birdsall	Michael G. Birdsall, Tansboro.
Woodbridge	Middlesex	7,631	.....	John H. Leiser, Woodbridge.
Woodland	Burlington	398	.....	Elmer Dunfee, Chatsworth.
Woolwich	Gloucester	2,291	Samuel Avis, Swedesboro.

List of Physicians of New Jersey

Arranged by Counties.

Atlantic County.

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| <p>Armstrong, L. H., 8 Illinois avenue, Atlantic City.</p> <p>Bailey, A. W., 1809 Pacific avenue, Atlantic City.</p> <p>Balliet, Lorenzo D., 4 Virginia avenue, Atlantic City.</p> <p>Barnes, W. M., 15 S. Pennsylvania avenue, Atlantic City.</p> <p>Bennett, Francis W., 1604 Pacific avenue, Atlantic City.</p> <p>Bennett, Wm. H., Pacific and Ohio avenues, Atlantic City.</p> <p>Bickel, Samuel D., 1701 Atlantic avenue, Atlantic City.</p> <p>Bieling, Theo. G., 16 S. Maryland avenue, Atlantic City.</p> <p>Bitler, J. C., Hammonton.</p> <p>Blackburn, Albert E., 1212 Pacific avenue, Atlantic City.</p> <p>Boysen, T. H., Egg Harbor City.</p> <p>Chew, E. C., 1414 Atlantic avenue, Atlantic City.</p> <p>Cochran, A. W., Hammonton.</p> <p>Crosby, Geo. W., 716 Atlantic avenue, Atlantic City.</p> <p>Crowell, Godfrey M., Hammonton.</p> <p>Cunningham, Charles, Hammonton.</p> <p>Cuskaden, A. D., 2000 Atlantic avenue, Atlantic City.</p> <p>Darnall, W. E., 1719 Pacific avenue, Atlantic City.</p> <p>De Mill, Garret, Pleasantville.</p> <p>Divine, Jane S., 601 Pacific avenue, Atlantic City.</p> <p>Elmer, J. U., Egg Harbor City.</p> <p>Fagerman, N. B., 84 N. Ohio avenue, Atlantic City.</p> <p>Fish, Clyde M., 1212 Pacific avenue, Atlantic City.</p> <p>Fleming, John R., 1903 Pacific avenue, Atlantic City.</p> <p>Fletcher, Geo. H., 1910 Arctic avenue, Atlantic City.</p> <p>Fox, Wm. W., City Hospital, Atlantic City.</p> <p>Frick, J. H., Pleasantville.</p> <p>Gardiner, Wm. G., Atlantic City.</p> | <p>Garrabratt, C., 1001 Atlantic avenue, Atlantic City.</p> <p>Gebring, G. R., Bakersville.</p> <p>Harris, G. M., Port Republic.</p> <p>Howard, John J., 21 S. Pennsylvania avenue, Atlantic City.</p> <p>Hodges, W. M., Atlantic City.</p> <p>Howard, E. E., Atlantic City.</p> <p>Ingram, Nelson, 1408 Atlantic avenue, Atlantic City.</p> <p>Jahucke, George F., Hammonton.</p> <p>James, H. C., Mays Landing.</p> <p>Johnson, C. R., 28 S. Kentucky avenue, Atlantic City.</p> <p>Johnson, C. Radcliffe, 1604 Pacific avenue, Atlantic City.</p> <p>Joy, J. A., 25 S. Illinois avenue, Atlantic City.</p> <p>Lake, Eva W., Pleasantville.</p> <p>Lyon, Malvern S., 716 Atlantic avenue, Atlantic City.</p> <p>Madden, E. H., Absecon.</p> <p>Madden, T. W., Absecon.</p> <p>Marvel, Emery, 711 Pacific avenue, Atlantic City.</p> <p>Marvel, Philip, 1616 Pacific avenue, Atlantic City.</p> <p>Miller, Mary, Ventor.</p> <p>Morris, S. LeRoy, 115 N. Maryland avenue, Atlantic City.</p> <p>Munson, M. L., 1503 Pacific avenue, Atlantic City.</p> <p>Nicholas, Henry D., Atlantic City.</p> <p>North, James, 29 S. Tennessee avenue, Atlantic City.</p> <p>North, J. H., Pleasantville.</p> <p>Pennington, B. C., 1212 Pacific avenue, Atlantic City.</p> <p>Pollard, W. M., 25 S. South Carolina avenue, Atlantic City.</p> <p>Powell, Wm. M., 16 S. Indiana avenue, Atlantic City.</p> <p>Reed, E. L., corner Pacific and Virginia avenues, Atlantic City.</p> <p>Reed, Talbot, 1625 Pacific avenue, Atlantic City.</p> |
|---|---|

- Thomas K., 22 N. Pennsylvania avenue, Atlantic City.
 r, E. A., 20 S. Tennessee avenue, Atlantic City.
 olds, Walter, 1322 Pacific avenue, Atlantic City.
 bury, Charles E., Mays Landing.
 man, Theo., Pacific avenue, S. Charles place, Atlantic City.
 , Edward S., 2327 Arctic avenue, Atlantic City.
 as, A. Barton, 1004 Pacific avenue, Atlantic City.
 , M. W., 1618 Pacific avenue, Atlantic City.
 , Warren H., 22 S. Ohio avenue, Atlantic City.
 ball, James W., 1519 Pacific avenue, Atlantic City.
 s, Milton L., 2012 Pacific avenue, Atlantic City.
 Richard M. Pleasantville.
 Walter C., 1913 Pacific avenue, Atlantic City.
- Souder, Charles, 2405 Atlantic avenue, Atlantic City.
 Souder, Lewis R., 1910 Pacific avenue, Atlantic City.
 Southern, Frank L., Pacific and Texas avenues, Atlantic City.
 Steelman, Philip S., Linwood.
 Stewart, W. Blair, Pacific and North Carolina avenues, Atlantic City.
 Stille, Samuel, 1546 Atlantic avenue, Atlantic City.
 Thompson, J. B., 1922 Pacific avenue, Atlantic City.
 Townsend, Mary E., 13 S. Pennsylvania avenue, Atlantic City.
 Wales, W. R., Mays Landing.
 Webster, J. B., 128 S. Maryland avenue, Atlantic City.
 Westney, Alfred W., 1802 Pacific avenue, Atlantic City.
 Williams, E. P., 36 Pennsylvania avenue, Atlantic City.
 Youngman, M. D., 1618 Pacific avenue, Atlantic City.

Bergen County.

- man, William P., Oradell.
 s, Charles F., Union street, Hackensack.
 rong, Dr., Rutherford Park.
 , M. S., Fairview.
 in, D. A., 97 Engle street, Englewood.
 i, Hardy M., Englewood.
 eorge B., Englewood.
 kstone, Frederick O., Oradell.
 ton, M., Westwood.
 s, Charles D., Rutherford.
 un, Charles, Rutherford.
 s, Dr., Ramseys.
 er, E. E., Hasbrouck Heights.
 d, E., State street, Hackensack.
 ell, Robert G., Tenafly.
 s, Garret, Ridgewood.
 7, C., Rutherford.
 s, Daniel, Englewood.
 sport, G. S., Garfield.
 John H., Rutherford.
 a, C. P., Ramseys.
 off, E., Ridgefield Park.
 nd, Cornelius A., Ridgewood.
 nd, John T., Ridgewood.
 , Henry, Ridgefield Park.
 Helen A., Englewood Hospital, Englewood.
 eorge B., Rutherford.
 y, Thirza L., Englewood.
 steen, L., Leonia.
 , F. S., Hackensack.
 ton, E. W., Oakland.
 g, John J., Tenafly.
 , M. A., Union street, Hackensack.
- Hillebrecht, Wm. A., 45 Euclid avenue, Hackensack.
 Hollister, H. H., Rutherford Park.
 Huges, Joseph, Fort Lee.
 Jehl, Eugene, Park Ridge.
 Knapp, L. P., Main street, Hackensack.
 Knox, H. L., 211 Union street, Hackensack.
 Langdon, Robert M., Closter.
 Lansing, J. B. W., Tenafly.
 Lasker, William, Hasbrouck Heights.
 McFadden, G. Howard, 259 Main street, Hackensack.
 Miller, William T., Palisades Park.
 Neer, Henry C., Park Ridge.
 Oxford, George M., Ridgewood.
 Parkhurst, G. Harrison, Allendale.
 Parsell, Lewis B., Closter.
 Pearson, Dr., Main street, Hackensack.
 Pittis, Godfrey, Allendale.
 Pratt, J. E., Dumont.
 Proctor, J. W., Englewood.
 Richter, A., Carlstadt.
 Sickenberger, Ernest F., Carlstadt.
 St. John, David, 256 State street, Hackensack.
 Stone, B. D., Westwood.
 Swayze, A. A., 47 Essex street, Hackensack.
 Taylor, W., Hackensack.
 Terry, J. W., Englewood.
 Townsend, T. E., Westwood.
 Trautwein, Dr., Lyndhurst.
 Underwood, B. F., Ridgefield Park.
 Vandewater, A. L., 68 State street, Hackensack.
 Van Horne, Byron G., Englewood.

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Van Horne, Carrie C., Englewood.
Ver Nooy, Benjamin A., Waldwick.
Vroom, W. L., Ridgewood.
Wells, John A., Englewood.

White, F. H., Main street, Hackensack.
Wyckoff, J. T., Leonia.
Wyler, Max, Fort Lee.
Zabriskie, Simeon J., Westwood.

Burlington County.

Adams, Ellsworth, Beverly.
Baird, David, Florence.
Barrington, Richard C., Mt. Holly.
Braddock, Richard S., Medford.
Branin, John W., Mt. Holly.
Brick, Benjamin K., Marlton.
Brown, J. C., Vincentown.
Brown, R. C., Mt. Holly.
Caley, Samuel, Mt. Holly.
Calver, G. W. H., Columbus.
Carey, John E., Lower Bank.
Cassady, J. B., Burlington.
Chaffee, Newton H., Chesterfield.
Conrow, A. E., Moorestown.
Currie, Joseph J., Beverly.
Dey, Charles L., Crosswicks.
Dubell, Joseph E., Columbus.
Dyer, Florence A., Riverton.
Faringer, H. R., Mt. Holly.
Flynn, J. J., Mt. Holly.
French, Edw. E., Bordentown.
Gauntt, F. Allen, Burlington.
Gilbert, Joseph S., Bordentown.
Glasgow, R. B., Burlington.
Gordon, A. L., Burlington.
Haines, Joseph R., Mt. Holly.
Haines, W. P., Marlton.
Hall, H. B., Riverton.
Hall, W. E., Burlington.
Harker, Charles, Mt. Holly.
Hollingshead, E., Pemberton.
Hollingshead, Irvin W., Moorestown.
Jauney, Frances S., Riverton.
Janney, J. D., Cinnaminson.
Kille, Chalkley J., Moorestown.
Leedom, Dr., Bordentown.
Maine, Elias D., Sykesville.
Marcy, Alex., Jr., Riverton.
Martin, W. L., Rancocas.

Mattson, Alfred, Moorestown.
McFarland, Burr. W., Bordentown.
Mecray, James, Maple Shade.
Melcher, William P., Mt. Holly.
Parry, W. C., Lumberton.
Parsons, Richard H., Mt. Holly.
Patterson, Austin H., Georgetown.
Pickett, Elmer D., Mt. Holly.
Powell, Benaiah B., Moorestown.
Pugh, J. Howard, Burlington.
Reeve, Josiah, Medford.
Richardson, James, Riverside.
Rink, E. F., Burlington.
Roberts, J. V., Beverly.
Sharp, L. L., Medford.
Sharp, Lewis L., Palmyra.
Shaw, Amos, Jacobstown.
Shippis, William H., Bordentown.
Shreve, Joseph, Burlington.
Small, Alex., Riverside.
Stees, Herman A., Beverly.
Stokes, Joseph, Moorestown.
Stokes, N. Newton, Moorestown.
Stroud, F. G., Moorestown.
Stroud, P. V. B., Marlton.
Taylor, Addison W., Beverly.
Tebo, Levi D., Bordentown.
Thorn, Nathan, Moorestown.
Vanderveer, George, Mt. Holly.
Wain, R. J., Burlington.
Weeks, E. P., Riverside.
Weller, H. K., Delaware.
Whitehead, G. L., Bordentown.
Whitehead, J. G. L., Bordentown.
Whitehead, W. W., Mt. Holly.
Wilkinson, George H., Moorestown.
Wilson, Percy, Moorestown.
Woolston, Elijah B., Marlton.
Young, Irene D., Bordentown.

Camden County.

Andrews, P. W., 327 Market street, Camden.
Armstrong, William H., Merchantville.
Artz, Jerome L., Cramer's Hill.
Baer, Joseph S., 565 Stevens street, Camden.
Bailey, W. G., 712 Broadway, Camden.
Beale, Philip W., 842 Federal street, Camden.
Benjamin, Dowling, 215 Cooper street, Camden.
Bennett, John K., Gloucester City.
Bennett, Samuel, 217 Market street, Camden.
Bicker, Francis J., 1701 Fillmore street, Camden.
den.

Blake, Duncan W., Gloucester City.
Blanchard, David, 630 Federal street, Camden.
Bonwill, Howard G., 921 S. Fifth street, Camden.
den
Braddock, C. S., Jr., Haddonfield.
Bray, Walter S., 92 N. Second street, Camden.
Bushey, S. G., 701 Pine street, Camden.
Casserson, Robert, 215 N. Third street, Camden.
Clement, Edgar, Haddonfield.
Clement, Lavinia B., Haddonfield.
Davis, Henry H., 540 Stevens street, Camden.

- Jacob M., 554 Washington street, Camden.
 William A., 300 Cooper street, Camden.
 Vernon E., 217 S. Sixth street, Camden.
 W. L., Gloucester City.
 Clarence B., 525 Broadway, Camden.
 John W., 525 Broadway, Camden.
 John G., 207 N. Sixth street, Camden.
 W. G., 219 Broadway, Camden.
 Frederick V., 628 S. Third street, Camden.
 Horace B., 1113 Cooper street, Camden.
 Alfred M., 330 Cooper street, Camden.
 Joel W., 610 Broadway, Camden.
 Howard C., 419 N. Fifth street, Camden.
 L. L., Haddonfield.
 E. L. B., 400 Linden street, Camden.
 Harry H., 315 Market street, Camden.
 C. R., 815 S. Fourth street, Camden.
 Anna E., 501 N. Fourth street, Camden.
 L. C., 919 S. Fifth street, Camden.
 O. B., 700 Market street, Camden.
 Oscar, 615 Market street, Camden.
 Charles F., 3320 Federal street, Camden.
 R. I., 300 Kaighn avenue, Camden.
 Wm. J., 931 Broadway, Camden.
 John J., Gloucester City.
 Louis, 442 Broadway, Camden.
 George W., Eighth and Walnut streets, Camden.
 J. M., Merchantville.
 Levi B., 592 Federal street, Camden.
 Conrad G., 565 Benson street, Camden.
 F. L., 615 Market street, Camden.
 J. I., Atco.
 E. M., 401 Linden street, Camden.
 Aaron, 111 N. Sixth street, Camden.
 Mary A., 111 N. Sixth street, Camden.
 Isaac N., 445 Haddon avenue, Camden.
 Joseph E., Blackwood.
 William H., 330 Cooper street, Camden.
 Allen S., 569 Broadway, Camden.
 William H., 411 N. Fourth street, Camden.
 Harry, Broadway, corner Cherry, Camden.
 Charles H., 15 W. Park avenue, Camden.
 W. B., Haddonfield.
 William S., 201 Broadway, Camden.
 William H., Fourth, corner Pine, Camden.
 William I., 904 Cooper street, Camden.
 Kirk, Grant E., 1801 Broadway, Camden.
 Lawrence, J. D., Merchantville.
 Leavitt, John F., 522 N. Third street, Camden.
 Lefevre, Annette, Blackwood.
 Lee, Thomas, 601 Walnut street, Camden.
 Lippincott, A. H., 106 Broadway, Camden.
 Lippincott, S. W., 610 Broadway, Camden.
 Litchfield, P. N., 1123 Kaighn avenue, Camden.
 Long, W. S., Haddonfield.
 Lyon, L. C., Magnolia.
 Lyon, M. S., Haddonfield.
 Macray, Dr., Merchantville.
 Marcy, F. W., 832 Penn street, Camden.
 Marcy, John W., Merchantville.
 Markley, Paul H., 511 Cooper street, Camden.
 Massinger, Charles J., Collingswood.
 McAllister, Alex., 682 Federal street, Camden.
 McGeorge, Wallace, 521 Broadway, Camden.
 McLennon, J., Gloucester City.
 McCray, Alex. M., 327 Cooper street, Camden.
 McCray, Paul M., 831 Penn street, Camden.
 Middleton, M. F., 428 Market street, Camden.
 Miller, W. E., 1025 S. Eighth street, Camden.
 Mines, M. K., 713 S. Third street, Camden.
 Moslander, William S., 901 Cooper street, Camden.
 Nicholson, Joseph L., 414 Penn street, Camden.
 Osmun, M. M., 815 Broadway, Camden.
 Palm, Howard F., 614 N. Second street, Camden.
 Pfeiffer, F. P., 222 N. Second street, Camden.
 Powell, William R., 702 Market street, Camden.
 Pratt, W. H., 406 N. Sixth street, Camden.
 Presley, Sophia, 405 Penn street, Camden.
 Quint, Silas H., 638 Market street, Camden.
 Ramsdell, E. S., 428 Linden street, Camden.
 Raughley, William, Berlin.
 Reader, A. B., 749 Walnut street, Camden.
 Richardson, Emma M., 581 Stevens street, Camden.
 Ridge, Joseph M., 302 Mickle street, Camden.
 Roberts, F. A., 643 Market street, Camden.
 Robinson, Frank, 518 Linden street, Camden.
 Ross, S. C., Gloucester City.
 Saunders, Morris M., 420 N. Second street, Camden.
 Saunders, O. W., 1813 S. Sixth street, Camden.
 Schellenger, E. A. U., 429 Cooper street, Camden.
 Shafer, William, Haddon avenue, Camden.
 Sharp, Dr., Berlin.
 Sharp, E. B., 424 Broadway, Camden.
 Sharp, Jennie, 424 Broadway, Camden.
 Shivers, B. H., Haddonfield.
 Shivers, C. H., Haddonfield.
 Smith, Henry A. M., Gloucester City.
 Smith, J. Anson, Blackwood.
 Smith, S. Bryan, 338 Stevens street, Camden.
 Sprenger, William A., 451 Kaighn avenue, Camden.
 Stem, Frank A., Berlin.

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Stevenson, John R., 23 E. Main street, Camden.
 Stock, Jacob F., 215 S. Fifth street, Camden.
 Stout, D. M., Berlin.
 Stroock, Daniel, 818 Federal street, Camden.
 Taylor, H. G., 305 Cooper street, Camden.
 Tomlinson, Edwin, Gloucester City.
 Tullis, Eli R., 408 Stevens street, Camden.
 Vansciver, John E. L., 445 S. Fourth street,
 Camden.

Ward, Lettie, 76 Broadway, Camden.
 West, M., 722 Market street, Camden.
 Westcott, William, Berlin.
 Williams, F. E., Haddonfield.
 Wills, J. H., 102 Cooper street, Camden.
 Wingender, W. P., 6 Penn street, Camden.
 Wood, Oran A., Magnolia.
 Woodward, George D., 211 Broadway, Camden.
 Wynn, Ephraim, 321 N. Third street, Camden.

Cape May County.

Abbott, Benjamin T., Ocean City.
 Cohen, N. A., Wildwood.
 Corson, C. B., South Seaville.
 Davis, D. R. W., Sea Isle City.
 Dix, J. Morgan, Cape May Court House.
 Douglass, John S., Tuckahoe.
 Downs, Isaac M., Cape May Court House.
 Foote, Theodore, Wildwood.
 Garrison, J. E., Ocean City.
 Hand, Anna M., Cape May City.
 Hand, John H., Dias Creek.
 Hutchinson, T. C., Ocean City.
 Lake, Wilson A., Cold Spring.
 Lake, Wilson R., Green Creek.
 Leach, Alonzo L., Cape May City.
 Leaming, J. F., Cape May Court House.
 Leaming, Walter S., Cape May City.

Marcy, Virgil, M. D., Cape May City.
 Marshall, Joseph C., Tuckahoe.
 Marshall, Randolph, Tuckahoe.
 Mecray, James, Cape May City.
 Phillips, E. H., Cape May City.
 Phillips, Walter, Cape May City.
 Physick, Emlen, Cape May City.
 Slaughter, James M., Rio Grande.
 Stevens, Albert G., West Cape May ; Eldredge
 P. O.
 Swain, Humphry, Goshen.
 Waggoner, J. S., Ocean City.
 Wales, Eli B., Cold Spring.
 Wales, W. R., Cape May City.
 Walker, J. Newton, Cape May City.
 Way, Eugene, Dennisville.
 Way, Julius, Cape May Court House.

Cumberland County.

Adams Orange H., Vineland.
 Applegate, J. C., Bridgeton.
 Bacon, S. L., Port Norris.
 Bateman, Ephraim, Cedarville.
 Bateman, F. M., Cedarville.
 Bech, Judson L., Vineland.
 Bennett, Samuel D., Millville.
 Bidwell, Edwin H., Vineland.
 Burt, N. Howard, Fairton.
 Butcher, George E., Dividing Creek.
 Butcher, Joseph, Heislerville.
 Butcher, Samuel, Mauricetown.
 Canwell, Joseph A., Vineland.
 Cooper, H. L., Vineland.
 Cooper, Louis, Vineland.
 Cornwell, Alfred, Bridgeton.
 Cunningham, George, Vineland.
 Davis, Theo G., 18 N. Pearl street, Bridgeton.
 Day, G. E., Millville.
 Day, S., Port Norris.
 Diamant, E. L., 118 E. Commerce street,
 Bridgeton.
 Dunlap, Mary J., Vineland.
 Eaton, F. M., Millville.
 Elmer, Henry W., Bridgeton.
 Elmer, Matthew K., 3 Franklin street, Bridge-
 ton.
 Faulkner, M. R., Vineland.

Fogg, Edward S., Shiloh.
 Foote, Theodore, Vineland.
 Glandon, A. P., Newport.
 Glendon, W. P., Cedarville.
 Goudy, E. S., Vineland.
 Greenwood, Nathaniel, Carmel.
 Halsey, J. S., Vineland.
 Ha d Leslie L., Leesburg.
 Harker, G. L., Port Norris.
 Harris, George A., 83 N. Laurel street, Bridge-
 ton.
 Hill, Charles T., Dividing Creek.
 Howard, Joseph T. D., Shiloh.
 Hummel, L. H., Greenwich.
 Jones, Ferdinand, Jr., Millville.
 Jones, John C., Millville.
 Judson, A. R., Newport.
 Kirchhoff, William F., Bridgeton.
 Kirk, Irving W., Fairton.
 Lloyd, Reba, 25 Bank street, Bridgeton.
 Mayhew, S. D., 114 E. Commerce street,
 Bridgeton.
 Mailly, Hamilton, 50 N. Pearl street, Bridge-
 ton.
 Miller, H. G., Millville.
 Moore, John H., Bridgeton.
 Neal, Charles B., Millville.
 Newell, W. L., Millville.

Oliver, David H., Bridgeton.
 Paullen, George M., Shiloh.
 Phillips, Charles C., Deerfield.
 Phillips, Lorenzo B., Deerfield.
 Putnam, J. H., Bridgeton.
 Robinson, Silas E., Newport.
 Sawyer, Waldo F., Vineland.
 Sheppard, Joseph, 36 Commerce street, Bridgeton.
 Smith, W. H. C., Millville.
 Smith, Thomas J., Bridgeton.
 Snyder, S. M., Greenwich.
 Sites, Elmore, Bridgeton.

Streets, David R., Bridgeton.
 Streets, Jacob G., Bridgeton.
 Taylor, Alex. C., 543 Landis avenue, Vineland.
 Thompson, John R. C., Bridgeton.
 Tomlinson, Joseph, Bridgeton.
 Wade, J. W., Millville.
 Ware, James B., Bridgeton.
 Ware, J. Vernon, Millville.
 Willets J. Howard, Port Elizabeth.
 Wilson, C. W., Vineland.
 Wilson, S. M., Bridgeton.

Essex County.

Allen, Henry W., 120 Market street, Newark.
 Allis, J. A., Montclair.
 Anderson, Henry J., 4 Orange Place Newark.
 Andrews, William J., 4 W. Park street, Newark.
 Ardrey, Sarah, 18 Camp street, Newark.
 Aerson, William H., Belleville avenue, Upper Montclair.
 Arnold, W. B., 440 Main street, Orange.
 Asher, Morris, 44 Ferry street, Newark.
 Asnis, E. J., 45 South Orange avenue, Newark.
 Aveson, W. H., Montclair.
 Ayres, J. S., 21 Avon avenue, Newark.
 Babbitt, George E., 28 Elm street, Newark.
 Bachmann, Charles, 72 South Orange avenue, Newark.
 Bachmann, William, 72 South Orange avenue, Newark.
 Bailey, Charles H., Bloomfield.
 Bailey, William O., 282 South Orange avenue, Newark.
 Baker, F. E., 116 Fairmount avenue, Newark.
 Baker, Walter S., 250 Mulberry street, Newark.
 Baldwin, A. K., 291 Plane street, Newark.
 Baldwin, E. H., 77 Clinton avenue, Newark.
 Baldwin, S. H., 478 Clinton avenue, Newark.
 Baldwin, T. H., 181 Washington street, Newark.
 Baldwin, W. E., 462 Orange street, Newark.
 Ballantine, A. D., 2 W. Park street, Newark.
 Becker, F. W., 180 Belmont avenue, Newark.
 Becket, George E., 185 Walnut street, East Orange.
 Beckwith, Tift, 176 Oakwood avenue, Orange.
 Beggs, F. W., 399 Seventh avenue, Newark.
 Bemiss, E. D., 57 Lafayette street, Newark.
 Bender, Asher H., 105 Halsey street, Newark.
 Bennett, Charles D., 167 Clinton avenue, Newark.
 Beynon, H., 202 Clinton avenue, Newark.
 Bianchi, A. R., 231 Orange street, Newark.
 Bingham, Arthur W., East Orange.
 Blakelock, G. Clinton, 18 N. Grove street, East Orange.
 Bleick, W., 340 Waverly avenue, Newark.

Bleyle, H. C., 118 Union street, Newark.
 Bolton, James R., 237 S. Ninth street, Newark.
 Bond Edwin, Caldwell.
 Bradin, E. DeL., 282 Belleville avenue, Newark.
 Bradshaw, James H., 2 High street, Orange.
 Braun, Rudolph, 261 Ferry street, Newark.
 Brien, W. M., Orange Valley.
 Brown, Joseph S., 43 S. Fullerton avenue, Montclair.
 Brown, P. D., Irvington.
 Brueckner, C., 185 Thirteenth avenue, Newark.
 Buerman, William, 122 Spruce street, Newark.
 Bunn, Frank C., 449 Main street, Orange.
 Burke, Charles V., 136 Bowery street, Newark.
 Burnett, Harriet, 95 Halsey street, Newark.
 Burnett, James R., 16 Chestnut street, Newark.
 Burns, E. L., 269 Broad street, Newark.
 Burrage, R. L., Prudential Life Insurance Co., Newark.
 Butler, Clarence W., Montclair.
 Buttner, Carl, 67 Clay street, Orange.
 Carmelli, G., 24 E. Mechanic street, Newark.
 Campbell, Wellington, Millburn.
 Carpenter, F. S., 168 Summer avenue, Newark.
 Carroll, W. E., 481 Broad street, Newark.
 Case, Levi W., Montclair.
 Cater, Douglass A., Orange.
 Cauffman, L., 93 Bleecker street, Newark.
 Chandler, William J., South Orange.
 Chapman, Albert W., Verona.
 Chapman, Robert W., Verona.
 Chapman, Dr., 492 High street, Newark.
 Christian, Albion C., Sharon avenue, Irvington.
 Christian, M. Osborne, Irvington.
 Church, C. Herbert, Nutley.
 Clark, A. M., 812 Highland avenue, Newark.
 Clark, J. Henry, 12 Walnut street, Newark.
 Cobb, George H., South Orange.
 Coe, R., 82 South street, Newark.
 Coit, H. L., 51 Halsey street, Newark.
 Condit, Alice A., Orange.

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- Condon, John F., 562 Summer avenue, Newark.
 Conkling, E. D. G., 224 Belleville avenue, Newark.
 Connelly, F. J., 224 Belleville avenue, Newark.
 Cook, H. F., 451 Orange street, Newark.
 Cooke, William H., 10 N. Munn avenue, East Orange.
 Corona, Lorenzo, 158 Eighth avenue, Newark.
 Corrigan, George F., 294 Walnut street, Newark.
 Corwin, T. W., 119 Belleville avenue, Newark.
 Corey, Horace C., 76 Central avenue, Newark.
 Courtright E. P., 76 Central avenue, Newark.
 Crane, J. W., 62 Thirteenth avenue, Newark.
 Cummins, Joseph H., 413 Clinton avenue, Newark.
 Cusack, T. G., 56 Centre street, Orange.
 Cyphers, I. E., Washington avenue, Belleville.
 Danzis, Max, 66 Morton street, Newark.
 Davenport, Peter B., Vailsburg.
 Davis, Frederick W., 28 Washington street, East Orange.
 Davis, Wm. H., 42 Arlington avenue, East Orange.
 Dawson, O., Caldwell.
 Delvin, Frank, 90 Congress street, Newark.
 Dennis, John, 237 Belleville avenue, Newark.
 Dennis, Laban, 30 Central avenue, Newark.
 De Vausney, M., 12 State street, Newark.
 Dieffenbach, R. G. P., 222 South Orange avenue, Newark.
 Dill, Daniel M., 451 Orange street, Newark.
 Disbrow, William S., 151 Orchard street, Newark.
 Dodd, R. L., 196 Clinton avenue, Newark.
 Dodge, Walter, 221 Day street, Orange.
 Donnelly, R. J., 27 South Thirteenth street, Newark.
 Dougherty, A. C., 158 Washington street, Newark.
 Drummond, E. A., 347 Washington street, Newark.
 Duncker, Charles H., 918 Broad street, Newark.
 Duncker, F. W., 918 Broad street, Newark.
 Duryee, John L., 435 High street, Newark.
 Eagleton, Wells P., 121 Orange street, Newark.
 Eddy, Charles, Bloomfield.
 Eddy, Stanton S., 7 N. Munn avenue, East Orange.
 Edwards, Sarah M., 247 Summer avenue, Newark.
 Egge, Julius K., 67 W. Kinney street, Newark.
 Elliott, Daniel, 84 Washington street, Newark.
 Elliott, James, 56 New street, Newark.
 England, Charles W., 117 Mechanic street, Newark.
 English, Dr., Millburn.
 English, D. E., Millburn.
 English, James, Clinton avenue, Irvington.
 English, J. R., 800 Clinton avenue, Newark.
 Epstein, H. B., 301 Bergen street, Newark.
 Feldman, Max, 51 Thirteenth avenue, Newark.
 Ferris, S., 869 S. Ninth street, Newark.
 Fewsmith, Joseph, 47 Central avenue, Newark.
 Fischer, A., 29 Barclay street, Newark.
 Fischer, Armin, 589 High street, Newark.
 Fitch, Thomas S., 493 Main street, Orange.
 Fitzgerald, Paul, 178 N. Seventh street, Newark.
 Fleger, Paul M., 172 Belmont avenue, Newark.
 Foster, H. W., 12 S. Fullerton avenue, Montclair.
 Francis, Richard P., Church street, Montclair.
 Frazier, Samuel H., 84 Park street, Newark.
 Fredericks, G., 349 Camden street, Newark.
 Freeman, Richard D., South Orange.
 Frey, Albert, 317 South Orange avenue, Newark.
 Friess, Frederick, 19 Elm street, Newark.
 Froelich, J. C., 243 Broome street, Newark.
 Gabriel, Charles, 373 Morris avenue, Newark.
 Gaffney, Matthew, 211 Plane street, Newark.
 Gage, R. S., 17 Gould avenue, Newark.
 Garrett, Walter D., East Orange.
 Garrison, Frank O., South Orange.
 Gauch, William, 284 Orange street, Newark.
 Geddes, Annie L., Montclair.
 Geddes, Isabel M., Newark.
 Gerbert, H. P., 329 Maird street, Orange.
 Gile, Francis A., 315 Essex street, Orange.
 Gillen, Robert F., 86 Clinton street, Newark.
 Givens, Bradford W., 12 N. Grove street, East Orange.
 Glatzmayer, H. A., 61 West street, Newark.
 Goodwin, Wm. M., 66 Congress street, Newark.
 Gould, E. J. T., 78 Carleton street, East Orange.
 Graves, Anna M., 121 Mount Prospect avenue, Newark.
 Graves, William B., East Orange.
 Gray, Thomas N., East Orange.
 Greddes, Anna L., Montclair.
 Greenbaum, S., 135 W. Kinney street, Newark.
 Greenfield, B. H., 145 South Orange avenue, Newark.
 Griffiths, C. B., 145 Monmouth street, Newark.
 Groves, C. A., 303 Main street, East Orange.
 Guenther, Emil E., 159 W. Kinney street, Newark.
 Guilian, R., 200 Eighth avenue, Newark.
 Hagar, John F., 85 Ferry street, Newark.
 Hagen, Charles W., 224 South Orange avenue, Newark.
 Hagerty, John F., 297 Central avenue, Newark.
 Hagney, F. W., 54 Sherman avenue, Newark.
 Hahn, A. J., 182 Clinton avenue, Newark.
 Haines, Eleanor, 986 Broad street, Newark.
 Halsey, L. W., 49 Church street, Montclair.
 Hamill, E. H., 230 Roseville avenue, Newark.
 Hampson, Clara, 331 Summer avenue, Newark.
 Harman, George W., 1900 Broad street, Newark.

- Harris, H. C., Hillside and Clark streets, Glen Ridge.
- Harrison, Albert J., 180 Hillside avenue, Orange.
- Hart, H. M., 274 Broad street, Newark.
- Hauck, W. J., 110 Bloomfield avenue, Newark.
- Haux, Hans, 393 Springfield avenue, Newark.
- Hawkes, E. Z., 481 Broad street, Newark.
- Hawley, S. S., 1 S. Thirteenth street, Newark.
- Hayden, Joseph H., 448 High street, Newark.
- Heberton, William W., South Orange.
- Hemsath, John, 80 W. Kinney street, Newark.
- Hendry, Hugh C., 16 Gouveneur street, Newark.
- Henriques, C. L., St. James Hospital, Newark.
- Herold, H. C. H., 77 Congress street, Newark.
- Hewlet, Peter V. P., 181 Plane street, Newark.
- Hexamer, Frederick, 23 South Orange avenue, Newark.
- Hicks, William H., 425 South Orange avenue, Newark.
- Hinckley, L. S., 425 South Orange avenue, Newark.
- Hitchcock, W. E., 55 Belleville avenue, Newark.
- Hoffman, George P., 277 Littleton avenue, Newark.
- Hoffman, James A., 126 Spruce street, Newark.
- Holden Edgar, 13 Central avenue, Newark.
- Hollister, L. E., 188 Clinton avenue, Newark.
- Holmes, Frances W., Upper Montclair.
- Holmes, George J., 1107 Broad street, Newark.
- Holmes, William H., 27 Bell street, Orange.
- Hopper, Thomas B., 57 Webster street, Newark.
- Horsford, Frederick, City Hospital, Newark.
- Howe, Edwin J., 985 Broad street, Newark.
- Hunt, Ralph H., 4 Prospect street, East Orange.
- Hyde, Louis D., Montclair.
- Iliff, E. P., 26 Camp street, Newark.
- Ill, Charles L., 1328 Springfield avenue, Newark.
- Ill, Edward J., 1002 Broad street, Newark.
- Jackson, George, 4 W. Park street, Newark.
- Jacobi, Albert, 58 Centre street, Orange.
- Jacobson, F. C., 118 Washington street, Newark.
- Jedel, M., 362 Warren street, Newark.
- Johnson, J. C., 11 Tichenor street, Newark.
- Johnson, William M., 1 Richmond street, Newark.
- Jones, S. W., 20 Academy street, Newark.
- Judson, W. H., 270 Clifton avenue, Newark.
- Kaufman, Emil, 63 New street, Newark.
- Kehling, Martin, 68 William street, Newark.
- Keim, W. F., 7 Roseville avenue, Newark.
- Kelly, J. W., 314 Bank street, Newark.
- Kent, George R., 39 Eighth avenue, Newark.
- Kipp, Charles J., 584 Broad street, Newark.
- Kitchen, J. M. W., 91 Prospect street, East Orange.
- Knevelt, W. H., Nutley.
- Knowles, F. A., Vailsburg.
- Knowles, F. E., South Orange.
- Kornemann, Henry A., 251 Springfield avenue, Newark.
- Kraemer, Charles F., 29 Thirteenth avenue, Newark.
- Krause, Henry G., 210 Bank street, Newark.
- Krichbaum, Philip E., Upper Montclair.
- Krichbaum, T. W., Upper Montclair.
- Laine, Edwin R., Caldwell.
- Lane, Francis A., East Orange.
- Langdon, Dr., 831 Mount Prospect avenue, Newark.
- Lauterborn, T. W., 243 Mulberry street, Newark.
- Lawrence, E. W., 45 Halsey street, Newark.
- Lee, Stephen G., 478 Main street, East Orange.
- Lefort, Marie L., 800 Washington street, Newark.
- Lehlbach, Charles, 22 Breintnall Place, Newark.
- Lehmacher, Francis, 164 Springfield avenue, Newark.
- Lippe, C. A. F., 250 Littleton avenue, Newark.
- Lippincott, J. D., 207 Summer avenue, Newark.
- Lockwood, F. M., 290 Prospect street, East Orange.
- Lockwood, Frank W., 97 Myrtle street, Bloomfield.
- Long, Herbert W., 119 Madison street, Newark.
- Lowerie, Thomas W., 30 Hill street, Newark.
- Lyenberger, R. B. W., City Hospital, Newark.
- Lyle, A. F., 203 S. Sixth street, Newark.
- Lyons, Ernest M., 276 Broad street, Newark.
- Madison, A. M., 188 Roseville avenue, Newark.
- Manley, Thomas F., St. James Hospital, Newark.
- Maghee, James M., Orange Valley.
- Malatesta, J. M., 42 Eighth avenue, Newark.
- Mandeville, Charles D., 410 Mulberry street, Newark.
- Mandeville, Frederick A., 945 Broad street, Newark.
- Mandeville, Frederick B., 945 Broad street, Newark.
- Martin, Noah R., 85 Halsey street, Newark.
- Martin, Peter W., 104 Wickliffe street, Newark.
- Martin, W. F., 323 South Orange avenue, Newark.
- Martland, William H., 1133 Broad street, Newark.
- Matthews, H. E., 396 Scotland street, Orange.
- McCartie, D. B., 170 Belleville avenue, Newark.
- McCormick, D. L., 252 Mulberry street, Newark.
- McEwen, Floy, 56 Oriental street, Newark.
- McKenzie, William H., 942 Broad street, Newark.
- Mead, S. R., 16 James street, Newark.
- Meeker, F. B., 63 First street, Newark.
- Meeker, Irving A., Upper Montclair.
- Megaro, P., 320 High street, Newark.

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- Mercelis, Elizabeth, Montclair.
 Mercer, Archibald, 81 Washington street, Newark.
 Merchant, M. H., St. Barnabas Hospital, Newark.
 Meyers, F. L., 418 Plane street, Newark.
 Miller, E., 847 Washington street, Newark.
 Miller, Henry A., 288 Plane street, Newark.
 Mills, A. M., 122 Washington street, Newark.
 Mitchell, William D., 82 South street, Newark.
 Mitchell, Winthrop D., 28 S. Grove street, East Orange.
 Moffat, Edgar V., 476 Main street, Orange.
 Morehouse J. T., 2 Freeman street, Orange.
 Morris, Clement, 75 Washington avenue, Newark.
 Morrison, J. B., 97 Halsey street, Newark.
 Motzenbecker, J., 48 Montgomery street, Newark.
 Mueller, G. W., 67 Springfield avenue, Newark.
 Mulholland, J. K., 912 Broad street, Newark.
 Munroe, F. H., 84 Roseville avenue, Newark.
 Murphy, Jane H., 124 Union street, Newark.
 Murray, E. W., 493 Summer avenue, Newark.
 Nadler, Frederick C., 81 Green street, Newark.
 Nash, Albert B., 10 S. Thirteenth street, Newark.
 Neare, Clifford R., East Orange.
 Newman, E. D., 20 Warren street, Newark.
 Newton, Annie B., South Orange.
 Newton, Richard C., Montclair.
 Nivison, Anna, 5 N. Eleventh street, Newark.
 Nolte, H. W., 53 Walnut street, Newark.
 Nydes, J., 12 Belmont avenue, Newark.
 O'Gorman, George, 986 Broad street, Newark.
 O'Reilly, Myles W., 393 Main street, East Orange.
 O'Reilly, William M., Orange.
 Osborne, C. Herbert, 271 Mulberry street, Newark.
 Ost, Henry, 471 Springfield avenue, Newark.
 Parsonnet, V., 177 Court street, Newark.
 Peck, Edward E., Caldwell.
 Peet, E. W., 343 Central avenue, Newark.
 Pennington, W., Irvington.
 Peters, A. C., 304 Belleville avenue, Newark.
 Petry, W., St. Barnabas Hospital, Newark.
 Phelan, Edward, 27 Thomas street, Newark.
 Phelan, T. F., 8 Hurlbut street, Orange.
 Philhower, George B., Nutley.
 Pitt, Jesse B., 207 Broad street, Bloomfield.
 Poliard, J. E., 555 Clinton avenue, Newark.
 Poor, Daniel W., 1 Essex avenue, Orange.
 Porter, Katherine, 83 Cleveland street, Orange.
 Potter, G. E., 87 Halsey street, Newark.
 Potter, Robert C., 84 Centre street, Newark.
 Power, Henry, Upper Montclair.
 Preston, Perry B., German Hospital, Newark.
 Price, N. G., 62 Boston street, Newark.
 Pulford, H. A., South Orange.
 Rand, John M., 10 Green street, Newark.
 Randall, C. H., 305 Belleville avenue, Newark.
 Rankin, William, Jr., 23 Cedar street, Newark.
 Read, Joshua W., 82 Park Place, Newark.
 Ribbans, R. C., 105 Halsey street, Newark.
 Richards, G. H., 30 Highland avenue, Orange.
 Richardt, H. T., 20 Mulford street, East Orange.
 Richman, E. M., 244 Mulberry street, Newark.
 Ricord, Philip, 433 High street, Newark.
 Ripley, Charles D., 84 Johnson avenue, Newark.
 Robertson, Samuel E., 205 Lafayette street, Newark.
 Robinson, B. A., 263 Mulberry street, Newark.
 Robinson, Manning N., 159 Elm street, Newark.
 Robinson, William D., 12 S. Grove street, East Orange.
 Roden, Hugh P., 315 Washington street, Newark.
 Rodgers, G. A., 291 Bank street, Newark.
 Roeber, W. J., 24 Monmouth street, Newark.
 Rogers, R., 1195 Broad street, Newark.
 Rogers, R. H., 224 Essex avenue, Orange.
 Rolerfort, G. W., 243 Plane street, Newark.
 Rostow, Clarence, 178 Spruce street, Newark.
 Roth, Oswald H., 210 Littleton avenue, Newark.
 Rudloff, William, 343 W. Kinney street, Newark.
 Runyon, Mefford, South Orange.
 Schaaf, E. O., 217 South Orange avenue, Newark.
 Scheppach, H. A., German Hospital, Newark.
 Schilling, W., 585 Springfield avenue, Newark.
 Schneider, C. A., 191 Spruce street, Newark.
 Schoeffler, Ernest, 7 Plum street, Newark.
 Schopfer, William E., 43 Read street, Newark.
 Schureman, Albert J., 39 Columbia street, Newark.
 Schureman, Charles A., 22 Hill street, Newark.
 Schwartz, Emanuel, 561 High street, Newark.
 Schwartz, H., 226 Mulberry street, Newark.
 Sealey, Edward, 369 Washington street, Newark.
 Seibert, Edgar, 575 Main street, Orange.
 Seidler, William F., 21 Ferry street, Newark.
 Seidmann, Marcus, 186 Springfield avenue, Newark.
 Seward, J. L., 414 Main street, Orange.
 Sharler, Sumner, 1034 Broad street, Newark.
 Snelton, Charles H., Montclair.
 Sherman, E. S., City Hospital, Newark.
 Shick, William F., 31 Park street, Newark.
 Simmons, M. H., 225 Cleveland avenue, Orange.
 Skinner, D. M., Belleville.
 Sleght, B. H. B., 31 Lincoln Park, Newark.
 Smalley, S. D., 95 Halsey street, Newark.

- Smith, Anna L., Montclair.
 Smith, Daniel W., 201 Walnut street, Newark.
 Smith, E. Fayette, 9 Fulton street, Newark.
 Smith, H. M., South Orange.
 Smith, L. H., 32 Chambers street, Newark.
 Sommerhoff, J. F., 67 Springfield avenue, Newark.
 Soper, O., Upper Montclair.
 Spottiswoode, Sarah C., 64 Cleveland street, Orange.
 Staehlin, Edward, 493 High street, Newark.
 Stage, J. S., 95 Jefferson street, Newark.
 Stanwood, R. G., 117 N. Sixth street, Newark.
 Steiner, Edwin, 492 High street, Newark.
 Stillwell, A. J., 57 Oakwood avenue, Orange.
 Stockton, Frank O., 17 W. Park street, Newark.
 Sutphen, C. E., 185 Roseville avenue, Newark.
 Sutphen, Joseph S., 193 Orange street, Newark.
 Sutphen, R. M., 5 Elm street, Newark.
 Sutphen, T. Y., 999 Broad street, Newark.
 Sweeney, Daniel, 353 Summer avenue, Newark.
 Synnott, Martin J., Montclair.
 Tarbell, H. A., St. Barnabas Hospital, Newark.
 Taylor, James S., Orange.
 Teeter, Charles E., 418 Orange street, Newark.
 Teimer, Theodore, 284 Belmont avenue, Newark.
 Tetreault, Frank J., 110 Main street, Orange.
 Thayer, Alfred I., 154 Clinton avenue, Newark.
 Thermer, Theodore, 284 Belmont avenue, Newark.
 Titus, Charles T., 126 N. Seventh street, Newark.
 Titus, William, 487 Orange street, Newark.
 Towle, Henry A., 16 Halsey street, Newark.
 Trachmer, Dr., 184 Springfield avenue, Newark.
 Trevisanello, Charles, 19 Market street, Newark.
 Tutschult, E., German Hospital, Newark.
 Twinch, Sidney A., 598 Broad street, Newark.
 Twitchell, A. B., 224 S. Seventh street, Newark.
 Underwood, C. F., 259 Prospect avenue, Newark.
 Vail, Herbert B., Belleville.
 Vail, M. H. C., Sanford street, Vailsburg.
 Van Buskirk, R., 10 Academy street, Newark.
 Van Duyn, Elizabeth, 10 Academy street, Newark.
 Van Gieson, William H., Bloomfield.
 Van Horn J. J., 154 Clinton avenue, Newark.
 Van Riper, A. H., Nutley.
 Van Wagenen, G. A., 101 N. Sixth street, Newark.
 Vinton, Maria M., Orange.
 Waite, George M., 569 High street, Newark.
 Wakeley, W. A., 414 Main street, Orange.
 Wallace, David L., 192 Clinton avenue, Newark.
 Wallhauser, H. J. F., 27 Academy street, Newark.
 Ward, Aaron C., 325 Clinton avenue, Newark.
 Ward, Edwin W., Bloomfield.
 Ward, J. B., Lyons Farms.
 Ward, Leslie D., 1058 Broad street, Newark.
 Ward, William R., Lyons Farms.
 Ward, William R., Clinton Place, Newark.
 Warren, G. L., 77 Houston street, Newark.
 Warner, W. H., 181 Verona avenue, Newark.
 Washington, Walter S., 8 Washington Place, Newark.
 Weaver, J. J. G., Montclair.
 Webner, Frederick C., 3 Belmont avenue, Newark.
 Weeks, G. M., 900 DeGraw avenue, Newark.
 Weiner, Alfred, 366 Washington street, Newark.
 Welshman, G. O., 150 Summer avenue, Newark.
 Wendel, A. V., 199 Littleton avenue, Newark.
 Wendelbow, L. T., 104 West street, Newark.
 West Eugene G., 14 Cleveland street, Orange.
 Westervelt, Marion Z., 205 Elwood avenue, Newark.
 Wherry, E. G., 414 Clinton avenue, Newark.
 White, E. H., 225 South Orange avenue, Newark.
 White, William H., Bloomfield.
 Whitehorn, H. B., Verona.
 Whitenack, M. R., 19 Bathgate Place, Newark.
 Whiteside, George D., 81 Park street, Orange.
 Wickman, A., 218 Washington street, Newark.
 Widman, A., 166 Springfield avenue, Newark.
 Wilder, A., 5 N. Eleventh street, Newark.
 Wilson, C. H., Saint Barnabas Hospital, Newark.
 Wilson, C. L., 494 Washington street, Newark.
 Wilson, George O., 147 Summer avenue, Newark.
 Wilson, James W., 117 Elm street, Newark.
 Wilson, John E., Bloomfield.
 Wilson, W. S., 96 Montclair avenue, Newark.
 Wintsch, C. H., 271 Fairmount avenue, Newark.
 Wolfe, Jacob S., Bloomfield.
 Wolfe, W. W., 893 Mulberry street, Newark.
 Woodruff, Franklin C., 351 Belleville avenue, Newark.
 Woodruff, P. H., 274 Broad street, Newark.
 Woolman, Henry M., 54 Thirteenth avenue, Newark.
 Worl, E. E., 271 High street, Newark.
 Wormley, James, 88 New street, Newark.
 Wrightson, James T., 12 Central street, Newark.
 Young, Charles, 23 E. Kinney street, Newark.
 Young, Joseph C., 964 Broad Street, Newark.
 Zeh, C. M., 17 Central avenue, Newark.

Gloucester County.

Ashcraft, John H., Mullica Hill.
 Ashcraft, Samuel, Mullica Hill.
 Bailey, George W., Wenonah.
 Brett, Miriam B., Wenonah.
 Brewer, William, Woodbury.
 Buck, Ralph E., Newfield.
 Burk, Charles M., Clarksboro.
 Buzby, Benjamin J., Swedesboro.
 Campbell, Duncan, Woodbury.
 Carr, H. H., Mullica Hill.
 Clark, Henry C., Woodbury.
 Clark, Henry H., Woodbury.
 Diverty, H. B., Woodbury.
 Duffell, Charles L., Clayton.
 Duffield, Elias M., Glassboro.
 Edwards, J. G., Williamstown.
 Fish, Charles, Aura.
 Fisler, C. Frank, Clayton.
 Gifford, T. Franklin, Woodbury.
 Glover, W. A., Woodbury.
 Grimshaw, O., Swedesboro.
 Haines, Charles T., Clarksboro.
 Halsey, L. M., Williamstown.
 Harvey, C. W., Wenonah.
 Heritage, Charles, Glassboro.
 Heritage, J. Down, Glassboro.
 Hillegass, E. Z., Mantua.
 Hunter, James, Jr., Westville.
 Husted, J. M., Clayton.
 Izard, Howard, Glassboro.
 Izard, Jacob, Glassboro.
 Laws, George C., Paulsboro.
 Lee, Thomas, Woodbury.
 Luffberry, M. J., Glassboro.
 McClure, James C., Williamstown.
 Oliphant, E. T., Bridgeport.
 Parker, T. E., Woodbury.
 Phillips, Cyrus B., Hurfville.
 Porch, Alfred, Clayton.
 Pounds, William H., Paulsboro.
 Reading, George E., Woodbury.
 Reeves, R. H., Paulsboro.
 Rodgers, Harry, Pitman Grove.
 Simmons, W. Grant, Swedesboro.
 Slaughter, L. N., Pitman Grove.
 Smith, A. A., Malaga.
 Sparks, Grant, Mantua.
 Stanger, S. F., Harrisonville.
 Stillwagon, P. E., Bridgeport.
 Stokes, Lydia W., Woodbury.
 Stout, Harry A., Wenonah.
 Trenchard, Albert, Glassboro.
 Williams, M. C., Woodbury.
 Williams, W. C., Woodbury.
 Wilson H. A., Woodbury.

Hudson County.

Abbott, H. D., 24 E. Thirty-third street, Bayonne.
 Abel, Henry C., 65 Wayne street, Jersey City.
 Adam, Clovis, 58 South street, Jersey City.
 Adams, H. F., 322 Webster avenue, Jersey City.
 Adams, Samuel, Webster avenue and Congress street, Jersey City.
 Allem, Ulamor, 401 Ogden avenue, Jersey City.
 Allers, Henry, Harrison.
 Andrews, B. A., 21 Erie street, Jersey City.
 Armstrong, E. C., Town of Union.
 Arlitz, W. J., 680 Bloomfield street, Hoboken.
 Atwell, D. R., 730 Bloomfield street, Hoboken.
 Baker, E. M., 108 Wayne street, Jersey City.
 Ball, Charles H., 1010 Garden street, Hoboken.
 Ballard, George C., Jersey City.
 Bance, Mary E., 211 Monticello avenue, Jersey City.
 Banta, Edward W., Jersey City Hospital, Jersey City.
 Barber, P. W., Arlington.
 Barry, Dennis W., 286 Washington street, Hoboken.
 Baumann, John J., 661 Jersey avenue, Jersey City.
 Baumann, Louis, 250 Fifth street, Jersey City.
 Beck, Alexander, Arlington.
 Benson, James J., West New York.
 Bidwell, H. G., 82 Madison avenue, Jersey City.
 Bising, Albert G., 831½ Webster avenue, Jersey City.
 Blanchard, O. R., 51 Madison avenue, Jersey City.
 Bogardus, H. J., 217 Bergen avenue, Jersey City.
 Bondy, E. S., 168 Danforth avenue, Jersey City.
 Borgmeyer, J. G. L., 90 W. Eighth street, Bayonne.
 Bowen, Horace, Hudson Boulevard, corner Sip avenue, Jersey City.
 Bowley, Helen F. L., 115 Monticello avenue, Jersey City.
 Bowyer, F. F., 262 Barrow street, Jersey City.
 Boyd, William S., 218 Eighth street, Jersey City.
 Bozeman, Nathan G., 462 Jersey avenue, Jersey City.
 Branch, Clement T., 330 Fourth street, Jersey City.
 Brinkerhoff, Henry H., 695 Bergen avenue, Jersey City.
 Broderick, John J., 174 Pacific avenue, Jersey City.
 Brokhaus, Maria H., 500 Hudson street, Hoboken.

- Brooke, W. Wallace, City Hospital, Jersey City.
- Brownell, Carl D., City Hospital, Jersey City.
- Buffett, E. P., 520 Bergen avenue, Jersey City.
- Bull, E. L., Madison avenue and corner Bramhall avenue, Jersey City.
- Burdett, John B., 535 Summit avenue Jersey City.
- Burnett, Henry H., 724 Washington street, Hoboken.
- Byrne Thomas, Bergen avenue and Fulton street, Union Hill.
- Cadmus, W. J., 239 Newark avenue, Jersey City.
- Cannon, George E., 441 Pacific avenue, Jersey City.
- Cecil, Dr., Chambers street, West Hoboken.
- Chabert, Romeo, 104 Seventh street, Hoboken.
- Chambers, T. R., 490 Jersey avenue, Jersey City.
- Chard, John A., 14 Virginia avenue, Jersey City.
- Child, Augustus L., 297 Fourth street, Jersey City.
- Child, Frank M., 927 Washington street, Hoboken.
- Clark, Walter J., 132 Palisade avenue, Jersey City.
- Clausen, Bernard, 736 Garden street, Hoboken.
- Clouse, M. W., Kearny.
- Colletti, Ignazio, 422 Grand street, Hoboken.
- Conant, J. B., Christ Hospital, Jersey City.
- Conelly, John, 276 Avenue C, Bayonne.
- Congdon, E. H., 40 Hutton street, Jersey City.
- Connell, John, Jersey City.
- Connelly, John T., 276 Avenue C, Bayonne.
- Converse, Charles B., 218 Palisade avenue, Jersey City.
- Corrigan, John E., 546 Bramhall avenue, Jersey City.
- Corwin, Fred. M., 7 W. Sixth street, Bayonne.
- Craig, Burdette P., Highland avenue and Hudson Boulevard, Jersey City.
- Craven, Joseph J., 306 Varick street, Jersey City.
- Crocker, Charles C., 100 Thirteenth street, Hoboken.
- Cropper, Charles W., 85 Gifford avenue, Jersey City.
- Culver, D. L., 287 York street, Jersey City.
- Culver, George M., 549 Summit avenue, Jersey City.
- Culver, S. Herbert, 114 Magnolia avenue, Jersey City.
- Cunnelly, John J., Hoboken.
- Dallas, Alexander, 24 E. Twenty-second street, Bayonne.
- Daly, Bernard A., 404 N. Fourth street, Harrison.
- Davey, Thomas N., 10 E. Thirty-fourth street, Bayonne.
- De Groff, Ephraim, Union Hill.
- De Hart, Florence, 92 Mercer street, Jersey City.
- De Hart, M. M., 99 Mercer street, Jersey City.
- De Long, Arthur D., 659 Jersey avenue, Jersey City.
- De Merritt, Chas. L., West Hoboken.
- Denis, L. A., 318 Stevens street, West Hoboken.
- Dickinson, G. K., 278 Montgomery street, Jersey City.
- Dickinson, Walter, 37 Crescent avenue, Jersey City.
- Dieffenbach, William H., 153 Webster avenue, Jersey City.
- Dingelstedt, R. H., 619 Hudson street, Hoboken.
- Dodd, William J., 101 Grand street, Jersey City.
- Dodson, L. W., 38 W. Hamilton Place, Jersey City.
- Doherty, John W., 272 Barrow street, Jersey City.
- Dolphin, M. O'F., Harrison.
- Donohue, L. F., 33 Dodge street, Bayonne.
- Drasel, Gustav W., 95 Jefferson street, Hoboken.
- Drasel, William A., 91 Jefferson street, Hoboken.
- Drayton, Henry S., 37 Emory street, Jersey City.
- Drossner, Morris, 566 Bergen avenue, Jersey City.
- Drummond, Isabel, 8 Astor Place, Jersey City.
- Dunkel, Edwin K., 264 Montgomery street, Jersey City.
- Durrie, N. A., 664 Jersey avenue, Jersey City.
- Edge, Benjamin, 95 Wayne street, Jersey City.
- Egenranch, William, West Hoboken.
- Ende, C. A., Town of Union.
- Enright, James G., Christ Hospital, Jersey City.
- Everitt, Chauncey V., 38 Boyd avenue, Jersey City.
- Everitt, John R., 38 Boyd avenue, Jersey City.
- Exton, James A., Arlington.
- Faber, John, 239 Central avenue, Jersey City.
- Falson, William F., 105 Grand street, Jersey City.
- Fendrick, Adam E., 36 Bonn Place, Weehawken.
- Feury, N. Frederick, 687 Bergen avenue, Jersey City.
- Fink, C. H., 315 York street, Jersey City.
- Finn, J. F., 157 Danforth avenue, Jersey City.
- Finnerty, John H., 217 Eighth street, Jersey City.
- Fisher, William R., 711 Washington street, Hoboken.
- Fletcher, Zachary P., 23 Cottage street, Jersey City.
- Foley, Michael F., 710 Hudson street, Hoboken.
- Fopeano, Joseph E., 265 Fourth street, Hoboken.
- Forman, A. C., 33 W. Thirty-second street, Bayonne.
- Forman, H. S., 360 Bergen avenue, Jersey City.

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- Frazee, Charles E., 165 Ocean avenue, Jersey City.
- France, P. W., Hoboken.
- Freeny, L. C., Town of Union.
- Freile, William, 208 Palisade avenue, Jersey City.
- Fyfe, G., 7 Madison avenue, Jersey City.
- Gamson, E., 41 W. Twenty-fourth street, Bayonne.
- Gardner, John W., 722 Ocean avenue, Jersey City.
- Gelbach, Rudolph W., 809 Hudson street, Hoboken.
- Geyer, Victor, 108 Adams street, Hoboken.
- Ghee, P. F., 286 Fifth street, Jersey City.
- Gilchrist, C. A., 916 Hudson street, Hoboken.
- Gilman, Robert B., 85 Congress street, Jersey City.
- Goldberg, Eugene H., Kearny.
- Goode, L. G., Jersey City.
- Gordon, L. J., Jersey City.
- Gordon, S. H., 189 Second street, Jersey City.
- Gray, Frank D., 296 Bergen avenue, Jersey City.
- Grew, Francis B., 614 Garden street, Hoboken.
- Grilli, G., West Hoboken.
- Guggenheim, M. L., Naegelis Hotel, Hoboken.
- Hardenburg, D. S., 854 Pacific avenue, Jersey City.
- Hart, E. P., 528 Jersey avenue, Jersey City.
- Hart, Hugh M., Christ Hospital, Jersey City.
- Hartnett, Eugene H., 289 York street, Jersey City.
- Hecht, Max, West Hoboken.
- Helper, Samuel, 626 Hudson street, Hoboken.
- Hendrick, Charles C., 586 Newark avenue, Jersey City.
- Henry, John P., 907 Summit avenue, Jersey City.
- Herzog, A. W., 901 Washington street, Hoboken.
- Herzog, Sophie, 590 Garden street, Hoboken.
- Hetherington, William L., 299 Varick street, Jersey City.
- Hill, A. V., Guttenberg.
- Hill, C. D., 102 Grand street, Jersey city.
- Hoening, Charles, 604 Hudson street, Hoboken.
- Hoffman, Joseph, 461 Jersey avenue, Jersey City.
- Hoffman, Peter, Jersey City.
- Hollister, Samuel A., 108 Danforth avenue, Jersey City.
- Holloway, John M., 38 Chestnut avenue, Jersey City.
- Holt, Henry D., 21 Lexington avenue, Jersey City.
- Hommell, P. E., 571 Bergen avenue, Jersey City.
- Hornblower, Josiah, 322 Central avenue, Jersey City.
- Hornblower, Theo. R., 681 Bergen avenue, Jersey City.
- Horne, Benjamin W., Jersey City Hospital, Jersey City.
- Horner, George A., 802 Grove street, Jersey City.
- Jacquemin, Theo. J., Town of Union.
- Jahr, Richard A., Palisade avenue, West Hoboken.
- Jacques, E. J., 74 Waverly street, Jersey City.
- Jardine, M. A., 84 Sip avenue, Jersey City.
- Jones, J. Morgan, 81 Sip avenue, Jersey City.
- Justin, John C., West New York.
- Kaiser, William B., 172 Park avenue, Hoboken.
- Kammerer, A. Charles, 1148 Summit avenue, Jersey City.
- Keating, John, 806 Montgomery street, Jersey City.
- King, George W., Snake Hill.
- Kingman, Robert, Bayonne.
- Kirsten, John A., 287 Varick street, Jersey City.
- Klein, Anna K., 172 Bowers street, Jersey City.
- Knox, John, 71 Danforth avenue, Jersey City.
- Kopetschuy, E. F., 591 Jersey avenue, Jersey City.
- Kopetschuy, Otto E., 591 Jersey avenue, Jersey City.
- Korn, William A., 227 Virginia avenue, Jersey City.
- Korngut, Samuel, 88 Twenty-second street, Bayonne.
- Kortright, Scott E., 818 Willow avenue, Hoboken.
- Kothe, Otto, Town of Union.
- Krauss, Gustav A., 238 Grove street, Jersey City.
- Kudlich, John, 506 Hudson street, Hoboken.
- Kudlich, William T., 408 Hudson street, Hoboken.
- Kuthe, Anna M. C., West Hoboken.
- Keuhne, Richard, 1118 Summit avenue, Jersey City.
- Kydd, Mary, 225 Tonnele avenue, Jersey City.
- Kyte, Calvin F., 816 Pavonia avenue, Jersey City.
- Lambert, F. E., 157 Ocean avenue, Jersey City.
- Lampson, M., 322 Pacific avenue, Jersey City.
- Lautmann, John, 632 Jersey avenue, Jersey City.
- Law, Charles K., 82 Glenwood avenue, Jersey City.
- Lebenstein, Joseph, 106 Eleventh street, Hoboken.
- Le Conte, J. N., City Hospital, Jersey City.
- Lemberg, Leon, 549 Boulevard, Bayonne.
- Lemmerz, Thomas H., 143 Magnolia avenue, Jersey City.
- Leppa, John J., 401 Adams street, Hoboken.

LIST OF PHYSICIANS.

241

- Lewis, Livingston L., 710 Washington street, Hoboken.
- Lewis, William C., 339 Pacific avenue, Jersey City.
- Lightfoot, George H., Arlington
- Lignot, Albert J., 269 Garfield avenue, Jersey City.
- Limeburner, C. A., 79 Danforth avenue, Jersey City.
- Linnell, E. H., 297 Washington street, Hoboken.
- Livingston, Helen S. F., 115 Monticello avenue, Jersey City.
- Lockner, John, 588 Jersey avenue, Jersey City.
- Lockwood, H. L., 111 Wayne street, Jersey City.
- Loomis, A. J., 282 Montgomery street, Jersey City.
- Lowe, William, 81 W. Eighteenth street, Bayonne.
- Luce, E. P., 465 Avenue D, Bayonne.
- Luck, John T., Town of Union.
- Lutkins, William O., 276 Montgomery street, Jersey City.
- Lynch, H. H., 591 Bramhall avenue, Jersey City.
- Macmillan, J. W., 313 Webster avenue, Jersey City.
- MacMurrrough, F. K., 808 Grand street, Jersey City.
- Marks, E. G., Arlington.
- Martin, John H., 451 Clinton avenue, West Hoboken.
- Martine, Jennie W., 201 Palisade avenue, Jersey City.
- Masten, H. V., Christ Hospital, Jersey City.
- Mattalieu, F. W., 62 Monticello avenue, Jersey City.
- Matthel, Edward, 86 Bowers street, Jersey City.
- McCann, H. M. M., 345 New York avenue, Jersey City.
- McClellan, D., West Hoboken.
- McConville, W. T., 526 Grove street, Jersey City.
- McCormick, D. L., 374 Communipaw avenue, Jersey City.
- McFarlane, Andrew, City Hospital, Jersey City.
- McGill, John D., 124 Mercer street, Jersey City.
- McKay, Joseph F., 486 Bramhall avenue, Jersey City.
- McLaughlin, George E., 41 Crescent avenue, Jersey City.
- McLean, John J., 33 Hoboken avenue, Jersey City.
- McLoughlin, Thos. J., 558 Jersey avenue, Jersey City.
- McNamara, T. C., 715 Park avenue, Hoboken.
- Meisgeier, Edward B., corner Hudson avenue and Union street, Town of Union.
- Menger, William, 431 Gardner street, Town of Union.
- Mertens, Heinrich C., West Hoboken.
- Meyer, William, West Hoboken.
- Meyers, Samuel I., 750 Avenue C., Bayonne.
- Mooney, John J., 250 Third street, Jersey City.
- Morris, S. V., 285 Barrow street, Jersey City.
- Mulvaney, Edward, 485 Jersey avenue, Jersey City.
- Muttart, Alder C., 806 Grand street, Jersey City.
- Muttart, George W., 702 Ocean avenue, Jersey City.
- Muzzy, A. T., 481½ Jersey avenue, Jersey City.
- Nalitsky, David I., 9 W. Twenty-third street, Bayonne.
- Nelden, Andrew L., 175 Summit avenue, Jersey City.
- Neugroschl, Israel, 737 Bloomfield street, Hoboken.
- Nevin, John J., 138 Mercer street, Jersey City.
- Nevin, Joseph L., 155 Bowers street, Jersey City.
- Nevin, William R., 932 Summit avenue, Jersey City.
- Nichols, Frank, 723 Washington street, Hoboken.
- Nichols, G. Louis, 723 Washington street, Hoboken.
- Nichols, Harry F., 723 Washington street, Hoboken.
- O'Connor, J. H., 279 Fourth street, Jersey City.
- Oestman, Aug. W., 961 Summit avenue, Jersey City.
- O'Gorman, M. W., 33 Erie street, Jersey City.
- O'Mara, Thos. J. G., 303 Summit avenue, Jersey City.
- Opdyke, Charles, 728 Ocean avenue, Jersey City.
- Opdyke, Livingstone A., 55 Clinton avenue, Jersey City.
- Palmer, Ella, 15 Madison avenue, Jersey City.
- Paolino, Luigi, 25 Railroad avenue, Jersey City.
- Pape, Gotthold, 134 Garden street, Hoboken.
- Parker, William J., 694 Bergen avenue, Jersey City.
- Parsons, John C., 311 York street, Jersey City.
- Paul, James, 207 Pavonia avenue, Jersey City.
- Pendergast, E. J., 47 Cottage street, Jersey City.
- Peterson, Charles A., 336 Garden street, Hoboken.
- Peterson, L. A., 326 Bloomfield street, Hoboken.
- Petrie, Robert M., 279 York street, Jersey City.
- Pfenning, A. C., West Hoboken.
- Phillips, Charles M., 723 Garden street, Hoboken.
- Pinder, David B., 211 Garden street, Hoboken.
- Pinkerton, W. A., Bayont e Hospital, Bayonne.
- Plrkner, Felix, 16 Fifteenth street, West New York.
- Pitts, G. F., 280 Washington street, Hoboken.
- Plath, J. Henry, Christ Hospital, Jersey City.

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- Pollak, Berthold S., 297 Varick street, Jersey City.
- Poock, Joseph T., 902 Garden street, Hoboken.
- Poole, Louis E., 521 Palisade avenue, West Hoboken.
- Pringle, John, East Newark.
- Purdy, Charles H., 312 Montgomery street, Jersey City.
- Putnam, Charles E., 61 81p avenue, Jersey City.
- Puzzee, Luigi, 312 Third street, Jersey City.
- Pyle, Edwin W., 338 Bergen avenue, Jersey City.
- Pyle, Imanuel, 54 Monticello avenue, Jersey City.
- Pyle, Wallace, Christ Hospital, Jersey City.
- Pyle, William L., 718 Bergen avenue, Jersey City.
- Rabe, Rudolph F., Weehawken.
- Radue, William F., 935 Summit avenue, Jersey City.
- Ramsey, Murray E., 494 Communipaw avenue, Jersey City.
- Randall, Charles H., Kearny.
- Rector, Joseph M., 307 York street, Jersey City.
- Rees, Annie C., Town of Union.
- Reid, John W., Kearny.
- Renwick, Andrew G., 33 Park street, Jersey City.
- Renwick, George, 28 Park street, Jersey City.
- Rhoads, T. C., Weehawken.
- Robertson, Frank C., 477 Bergen avenue, Jersey City.
- Robinson, John A., 719 Avenue C, Bayonne.
- Rochester, Gertrude, 58 Paterson street, Jersey City.
- Rooney, Joseph G., 125 South street, Jersey City.
- Rosenkraus, James H., 326 Hudson street, Hoboken.
- Rosenstein, S., 518 Bloomfield street, Hoboken.
- Rothe, H. E., Harrison.
- Rowe, Norman L., 76 Montgomery street, Jersey City.
- Rudolph, John J., 606 Garden street, Hoboken.
- Rue, Henry B., 921 Bloomfield street, Hoboken.
- Sanborn, J. L., 17 E. Thirty-third street, Bayonne.
- Sauer, Ferdinand N., 79 Coles street, Jersey City.
- Schindeler, Theodore, 316 Hudson street, Hoboken.
- Schlager, George, 217 Hudson street, Hoboken.
- Schlaich, Anna, 64 Lincoln street, Hoboken.
- Schlemm, Richard, Union Hill.
- Schmidt, Julius W. A., West Hoboken.
- Seay, Cornelius J., 966 Summit avenue, Jersey City.
- Selnow, Frederick C., 61 Wayne street, Jersey City.
- Senfleben, Hugo, 100 River street, Hoboken.
- Sexsmith, George H., 719 Avenue C, Bayonne.
- Shenier, L. H., West New York.
- Slevin, Walter T., City Hospital, Jersey City.
- Shera, George W., 6 W. Hamilton Place, Jersey City.
- Shewwood, H. D., 26 Hoboken avenue, Jersey City.
- Silvers, G. M., Fuller Building, Jersey City.
- Simmons, Harris R., 557 Bramhall avenue, Jersey City.
- Simpson, M. G., Jersey City.
- Simon, C. Irving, 722 Washington street, Hoboken.
- Sisler, John H., 618 Ocean avenue, Jersey City.
- Smith, Henry V. A., 3077 Hudson Boulevard, Jersey City.
- Smith, J. S., 16 W. Thirty-third street, Bayonne.
- Snyder, Charles F., 539 Summit avenue, Jersey City.
- Snyder, John E. C., 316 Hudson street, Hoboken.
- Spaeth, Louis A., 221 Pavonia avenue, Jersey City.
- Spence, Henry, 481 Jersey avenue, Jersey City.
- Spiegel, Leo, 256a Ninth street, Jersey City.
- Squier, M. F., 234 Harrison avenue, Harrison.
- Sprague, Ezra K., 283 Grove street, Jersey City.
- Stack, Joseph F. X., 212 Garden street, Hoboken.
- Steadman, Evan T., 635 Washington street, Hoboken.
- Steadman, Walter, 213 Garden street, Hoboken.
- Stellwagon, F. B., Union Hill.
- Stevens, P. F., 960 Avenue D, Bayonne.
- Stewart, Robert, 32 Madison avenue, Jersey City.
- Strasser, Aug. A., Arlington.
- Stout, S. V. W., 995 Summit avenue, Jersey City.
- Straughn, Fred., 9 Astor Place, Jersey City.
- Toepfer, Albert, 233 Central avenue, Jersey City.
- Vall, Floyd E., 23 Clifton Place, Jersey City.
- Valentine, E. J. G., 42 Cottage street, Jersey City.
- Vander Back, J., Guttenberg.
- Van Nuis, Charles, 1113 Washington street, Hoboken.
- Varick, William W., Jersey City.
- Vernaglia, Antonio, 335 First street, Jersey City.
- Von Forckenbeck, Alfred, 65 Ogden avenue, Jersey City.
- Vreeland, Clarence L. F., 69 Lembeck avenue, Jersey City.
- Vreeland, Hamilton, 79 Summit avenue, Jersey City.
- Warden, A. W., Town of Union.
- Ware, James W., 946 Avenue D, Bayonne.

- Watscheid, A. J., Union Hill.
 Watson, W. P., 319 York street, Jersey City.
 Weigand, Otto A., 1151 Summit avenue, Jersey City.
 Weissgier, Dr., Spring street, West Hoboken.
 Wenger, Dr., Gardner street, Union Hill.
 Wersebe, Frederick W., 25 Reed street, Jersey City.
 West, John E., 636 Ocean avenue, Jersey City.
 White, Wallace, West Hoboken.
 Wilkinson, George, 274 Bergen avenue, Jersey City.
 Wilkinson, Walter, 37 Crescent avenue, Jersey City.
 Williams, George S., 320 River street, Hoboken.
- Williams, John, Arlington.
 Williams, Thomas D., 5 Montgomery street, Jersey City.
 Willis, Lillian A., 3 Astor Place, Jersey City.
 Willis, Mary A., 3 Astor Place, Jersey City.
 Wolff, F. C., 1136 Harden street, Hoboken.
 Wolfson, Joseph, 302 Montgomery street, Jersey City.
 Wolfstrim, Louis, 210 Hudson street, Hoboken.
 Woodruff, S. R., 9 E. Thirty-third street, Bayonne.
 Zenneck, Julius, 204 Eleventh street, Hoboken.

Hunterdon County.

- Alpaugh, William C., High Bridge.
 Apgar, F. A., New Germantown.
 Bartow, George W., Three Bridges.
 Berkaw, Willard E., Annandale.
 Best, George W., Rosemont.
 Boyer, Charles H., Riegelsville.
 Burd, T. B. J., Flemington.
 Closson, Edw. W., Lambertville.
 Cornog, William E., Sergeantsville.
 Cramer, Isaac S., Flemington.
 Creveling, P. G., Little York.
 Creveling, W. S., Valley.
 Crispin, Samuel D., Bloomsbury.
 Darnell, C. R., Milford.
 Decker, T. H., Frenchtown.
 Denny, E. K., Frenchtown.
 Ewing, J. H., Flemington.
 Exton, Henrietta L., Clinton.
 Finney, W. F., Frenchtown.
 Frace, J. M., Clinton.
 Frita, John H., Lambertville.
 Fulper, T. B., Lebanon.
 Grim, Frank S., Locktown.
 Halstead, C. F., High Bridge.
 Harman, Henry M., Frenchtown.
 Hart, A. M., Ringoes.
 Herron, T. M. A., Junction.
 Hunt, Edgar, Glen Gardner.
 Johnson, F. L., Stanton.
 Johnson, John V., Stanton.
 Johnson, Thomas, Readington.
- Knight, M. D., Clinton.
 Knight, William, Clinton.
 Larrison, C. W., Ringoes.
 Larrison, Frank W., Lambertville.
 Leidy, E. D., Baptisttown.
 Lindabury, J. L., Bloomsbury.
 Low, F. C., Junction.
 Lowe, J. N., Milford.
 McGill, Peter, Lambertville.
 Miller, H. H., Lebanon.
 Miller, John, Califon.
 Miller, Theodore, Califon.
 Mills, Clifford, Califon.
 More, E. H., White House.
 Naah, A. B., Frenchtown.
 Nixon, Warford, L., Readington.
 Pursell, W. W., White House Station.
 Reigel, E. L., Bloomsbury.
 Romaine, George L., Lambertville.
 Salmon, Leon T., Lambertville.
 Schenck, W. H., Flemington.
 Servis, Howard, Junction.
 Silvara, J. W., Ringoes.
 Snowball, J. W., Flemington.
 Snyder, Q. E., Quakertown.
 Sproul, O. H., Flemington.
 Stites, Joseph A., Lebanon.
 Van Sickel, S., Clinton.
 Warrington, W. C., Clinton.
 Wenner, George V., Milford.
 Young, Peper C., Ringoes.

Mercer County.

- Adams, C. F., 52 W. State street, Trenton.
 Anderson, H. M., Trenton.
 Allen, Charles L., State Hospital, Trenton.
 Armstrong, Alex., 205 S. Broad street, Trenton.
 Atkinson, A. W., Trenton.
 Barwis, Elmer, 211 Hamilton avenue, Trenton.
 Beatty, H. M., 38 Centre street, Trenton.
 Bergen, E. H., 50 Nassau street, Princeton.
- Brewer, C., Third and Federal streets, Trenton.
 Britton, Charles P., Trenton.
 Bruere, A. T., Trenton.
 Bruyere, J., 123 Perry street, Trenton.
 Bayles, J. G., 159 Nassau street, Princeton.
 Buckman, M. P., Trenton.
 Carling, W. M., 567 S. Warren street, Trenton.

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- Chattin, F. J., 48 W. State street, Trenton.
 Clark, W. A., Jr., 51 W. State street, Trenton.
 Cooper, I., 32 W. State street, Trenton.
 Cooper, J. R., 225 Hamilton avenue, Trenton.
 Cort, Paul L., Trenton.
 Costill, H. B., St. Francis Hospital, Trenton.
 Craythorn, C. J., 202 Spring street, Trenton.
 De Witt, E., Lawrenceville.
 Day, A. H., Trenton.
 Dickinson, E. L., 101 Greenwood avenue, Trenton.
 Dorety, P. J., Trenton.
 Doud, Edward J., 803 E. State street, Trenton.
 Elmer, W., Sr., 44 W. State street, Trenton.
 Fee, E. K., Lawrenceville.
 Fell, A. S., Trenton.
 Felty, J. C., State Hospital, Trenton.
 Franklin, George H., Hightstown.
 Freeman, Samuel, Trenton.
 French, E. F., Trenton.
 Gelsinger, Samuel D., Hightstown.
 Gerry, C. W., Trenton.
 Gordon, C. H., 880 E. State street, Trenton.
 Griffith, W. H. G., 217 Hamilton avenue, Trenton.
 Hall, W. J., 281 N. Warren street, Trenton.
 Hart, Edgar, Pennington.
 Hart, Israel, Pennington.
 Hawke, Edw. S., Montgomery street, Trenton.
 Hollingshead, E., Trenton.
 Hunt, A. I., Hamilton Square.
 Ivins, Howard, 122 Brunswick avenue, Trenton.
 Jamieson, J. S., 48 W. State street, Trenton.
 Jenkins, M., 186 Walnut avenue, Trenton.
 Johnston F., 505 S. Warren street, Trenton.
 Johnston, J. P., Hightstown.
 Kline, A. K., 12 Stockton street, Princeton.
 Lalor, W. S., 129 N. Warren street, Trenton.
 Leavitt, C. B., Trenton.
 Leavitt, L., Trenton.
 Loos, I. B., 310 E. State street, Trenton.
 Lytle, William J., Princeton.
 Macdonald, A. K., 11 University Place, Princeton.
 Macfarland, Burr W., 19 E. State street, Trenton.
 Mackenzie, T. H., 528 E. State street, Trenton.
 Madden, W. F., 219 Centre street, Trenton.
 McCullough, J. H., Trenton.
 McCullough, W. G., Trenton.
 McGalliard, B. W., 229 E. State street, Trenton.
 Miller, John A., Hopewell.
 Moore, George R., 259 Hamilton avenue, Trenton.
 Moore, Robert H., 100 S. Clinton avenue, Trenton.
 Norton, H. G., 429 E. State street, Trenton.
 Oliphant, N. B., 152 W. State street, Trenton.
 Parker, G. H., 420 E. State street, Trenton.
 Phillips, R. H. C., 243 N. Warren street, Trenton.
 Pierson, T. A., Hopewell.
 Radcliffe, William, Pennington.
 Reddan, Martin W., 121 Perry street, Trenton.
 Ridgway, George M., Trenton.
 Robbins, George R., Hamilton Square.
 Rogers, E. H., 126 N. Warren street, Trenton.
 Rogers, R. R., Sr., Trenton.
 Rogers, R. R., Jr., Trenton.
 Rogers, W. T., Trenton.
 Satterthwaite, L. H., 45 W. State street, Trenton.
 Schoening, G. A., 228 Perry street, Trenton.
 Shaw, J. B., 119 S. Warren street, Trenton.
 Shepherd, C., 186 S. Broad street, Trenton.
 Shepherd, I. M., 188 S. Broad street, Trenton.
 Silver, George A., Windsor.
 Sommer, G., 229 Perry street, Trenton.
 Stevenson, W. D., 308 E. State street, Trenton.
 Stokes, A., 527 Monmouth street, Trenton.
 Stoneman, E. A., 145 Morris avenue, Trenton.
 Struble, W. McD., Tyler street and Clinton avenue, Trenton.
 Tatum, James D., 887 W. State street, Trenton.
 Titus, George E., Hightstown.
 Tompkins, L. D., W. State street, Trenton.
 Turner, Irvine F. P., Titusville.
 Van Duyn, W. B., 183 Perry street, Trenton.
 Van Neet, George, Hopewell.
 Ward, John A., State Hospital, Trenton.
 Weeks, David F., W. State street, Trenton.
 Warman, D., 239 Chestnut avenue, Trenton.
 Wells, Joseph M., 922 Edgewood avenue, Trenton.
 Wikoff, J. H., 22 Nassau street, Princeton.
 Wilbur, W. L., Hightstown.
 Williams, Frank H., 101 Greenwood avenue, Trenton.
 Witte, E. B., 425 E. State street, Trenton.
 Worthington, A. H., 110 W. State street, Trenton.
 Worthington, H. R., 110 W. State street, Trenton.
 Wright, H. E., 66 Nassau street, Princeton.
 Wyckoff, W. W., 12 N. Warren street, Trenton.
 Yard, P. W., Trenton.

Middlesex County.

- Albright, J. E., South Amboy.
 Andrus, Charles H., Metuchen.
 Applegate, G. T., New Brunswick.
 Baldwin, Henry R., New Brunswick.
 Billingham, Walter A., South Amboy.
 Blackwell, L. S., 218 High street, Perth Amboy.
 Blissett, F. W., South River.
 Brace, H. M., Perth Amboy.
 Brakley, P. W., Dunellen.
 Burnett, C., South River.
 Carroll, Edgar, Dayton.
 Clark, S. V. D., New Brunswick.
 Cook, H. G., New Brunswick.
 Crandall, I. C., Old Bridge.
 Dana, E. B., Metuchen.
 Dennelsbeck, Joseph, Spottswood.
 Donahue, F. M., New Brunswick.
 Dudley, G. S., New Brunswick.
 English, D. C., New Brunswick.
 Evans, S. E., South River.
 Freeman, S. E., Woodbridge.
 Haines, E. E., South Amboy.
 Henry, Frank, Perth Amboy.
 Hoagland, B. W., Woodbridge.
 Holmes, J. C., Cranbury.
 Hubbard, W. W., Perth Amboy.
 Hults, E. A., 220 High street, Perth Amboy.
 Hunt, A. Clark, Metuchen.
 Keasby, W. P., Perth Amboy.
 Levy, Henry, 102 Smith street, Perth Amboy.
 Long, Samuel, New Brunswick.
 Lund, John L., 181 High street, Perth Amboy.
 Maas, Charles T., New Brunswick.
 Manning, Anna, Perth Amboy.
 McKenzie, William, Metuchen.
 Meacham, Thomas V., New Brunswick.
 Moore, W. M., Metuchen.
 Nelson, William J., New Market.
 Phillips, H. W., Perth Amboy.
 Ramsey, William E., Perth Amboy.
 Reason, John J., Carteret.
 Rice, J. W., New Brunswick.
 Riva, F. E., Milltown.
 Selover, Sarah E. E., South River.
 Shannon, P. A., New Brunswick.
 Slack, Clarence M., New Brunswick.
 Smith, A. L., New Brunswick.
 Spencer, Ira T., Woodbridge.
 Stephens, David, New Brunswick.
 Suydam, J. L., Jamesburg.
 Symmes, H. C., Cranbury.
 Treible, William H., Perth Amboy.
 Tiegnowan, A., South Amboy.
 Tyrrell, G. W., 222 State street, Perth Amboy.
 Van Marter, John S., New Brunswick.
 Voorhees, C. H., New Brunswick.
 White, J. Leon, South Amboy.
 Whitaker, J. L., Cranbury.
 Whitford, M. J., New Market.
 Williamson, Nicholas, New Brunswick.
 Wilson, J. H., Perth Amboy.
 Woods, A. L., South River.
 Zant, H. D., Jamesburg.

Monmouth County.

- Ackerman, J. F., Asbury Park.
 Ackerman, Joseph, Asbury Park.
 Alday, H. B., Ocean Grove.
 Alday, J. H., Ocean Grove.
 Anderson, William E., Englishtown.
 Andrews, R. G., Navesink.
 Applegate, Asher T., Englishtown.
 Armstrong, A. A., Fair Haven.
 Armstrong, W. A., Red Bank.
 Arrowsmith, Joseph E., Keyport.
 Baker, G. H., Long Branch.
 Barr, D. M., Long Branch.
 Beach, E. W., West Long Branch.
 Beach, William B., Eatontown.
 Beegle, I. N., Ocean Grove.
 Bennett, J. W., Long Branch.
 Bennett, E. S., Asbury Park.
 Beveridge, William W., Asbury Park.
 Bevin, W. A., Freehold.
 Bradner, Wesley K., Bradley Beach.
 Brown, A. G., 139 Broad street, Red Bank.
 Bryan, Joseph H., Asbury Park.
 Budlong, O. W., Belford.
 Chadwick, Francis T., Asbury Park.
 Chasey, James, Long Branch.
 Clark, O. A., Long Branch.
 Coleman, Frederick F., Asbury Park.
 Cooper, J. E., Shrewsbury.
 Crater, E. W., Oceanport.
 Currie, Mrs. Dr., Ocean Grove.
 Curtis, T. A., Red Bank.
 Davison, J. F., Asbury Park.
 Disbrow, Stephen A., Farmingdale.
 Ely, J. D., Marlboro.
 Ervin, Nathan, Matawan.
 Ewing, Susan, Atlantic Highlands.
 Fay, George D., Atlantic Highlands.
 Field, Edwin, Red Bank.
 Forman, D. McLean, Freehold.
 Freeman, Otis R., Freehold.
 Green, J. O., Long Branch.
 Haglestam Richard, Matawan.

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Harlin, William H., Oceanport.
 Hendrickson, Daniel D., Middletown.
 Hendrickson, H. A., Atlantic Highlands.
 Hepburn, William M., Freehold.
 Herbert, R. W., Manasquan.
 Hetrick, Samuel L., Asbury Park.
 Higgins, A. S., Manasquan.
 Hoagland, Garret G., Keyport.
 Hughes, Henry, Long Branch.
 Jackson, A. J., Matawan.
 Johnson, H. P., Allentown.
 Johnson, Samuel, Asbury Park.
 Johnson, W. E., Keyport.
 Kinmouth, H. S., Asbury Park.
 Kinmouth, William R., Farmingdale.
 Kirkbride, M. F., Spring Lake Beach.
 Knecht, C., Matawan.
 Knight, T. R., Spring Lake.
 Kurtz, W. U., Eatontown.
 Long, Isaac S., Freehold.
 Luther, Frederic M., Long Branch.
 Mackintosh, Sarah F., Asbury Park.
 Marren, R. W., Asbury Park.
 Marsden, Dr., Red Bank.
 Maynard, Joseph G., Freehold.
 McMellen, William T., Perrineville.
 McMillan, George N., Turkey.
 Minmouth, W. L., Belmar.
 Mitchell, Henry, Asbury Park.
 Morton, E., Red Bank.
 Neafie, Harry, Freehold.
 Palmer, Charles A., Farmingdale.
 Patterson, William F., Chapel Hill.
 Pemberton, H. H., Long Branch.
 Price, T. C. Imlaystown.

Pumyea, D. B., Allentown.
 Rafferty, Peter P., Red Bank.
 Reed, Edwin B., Asbury Park.
 Reed, J. J., Seabright.
 Roberts, D. E., Keyport.
 Rose, J. Turner, West Park.
 Rush, J. C., Red Bank.
 Sayre, J. E., Red Bank.
 Shafer, George W., Creamridge.
 Shaw, R. E., Long Branch.
 Slocum, W. H., Long Branch.
 Speck, J. Frank, Asbury Park.
 Starks, W. H. L., Ocean Grove.
 Straughn, C. C., Matawan.
 Tantum, P. L., Ocean Grove.
 Taylor, Edw. F., Middletown.
 Taylor, John, Asbury Park.
 Thompson, C. H., Belmar.
 Thompson, Fred. V., Holmdel.
 Toms, F. D., Keyport.
 Treat, C. R., Belmar.
 Trout, W. W., Spring Lake.
 Tunis, George S., Manasquan.
 Tusting, R. A., Asbury Park.
 Upham, D. Ella P., Asbury Park.
 Van Fleet, Walter, Little Silver.
 Van Mater, John H., Atlantic Highlands.
 Wainright, J. B., Manasquan.
 Warner, W. B., Red Bank.
 Whitmore, W. S., Red Bank.
 Wilbur, G. F., Asbury Park.
 Williamson, Alex., Asbury Park.
 Wright, Laura M., Ocean Grove.
 Woolley, J. Scudder, Long Branch.

Morris County.

Adsit, N. H., Succasunna.
 Anderson, Calvin, Madison.
 Barker, P. C., Morristown.
 Bebout, T. W., Stirling.
 Becker, A., Morristown.
 Becker, G. A., Morristown.
 Beling, Christopher C., Morris Plains.
 Bennett, R. A., Dover.
 Bishop, Louis F., Morristown.
 Blackwell, E. T., Stephensburg.
 Carpenter, A. E., Boonton.
 Coates, George A., Butler.
 Condit, A. W., Dover.
 Condit, I. W., Dover.
 Connett, George C., Morristown.
 Cook, R. L., Dover.
 Cooper, E. P., Troy Hills.
 Crittenden, T. R., Dover.
 Cummins, George O., Dover.
 Day, Harris, Chester.

Day, H. V., Butler.
 Dearborn, George S., Rockaway.
 De Groot, George S., Mendham.
 Derry, W. E., Dover.
 Douglass, J. C., 98 Maple avenue, Morristown.
 Evans, B. D., Morris Plains.
 Farrow, Joseph R., German Valley.
 Farrow, J. Willard, German Valley.
 Farrow, Levi, Middle Valley.
 Flagge, F. W., Rockaway.
 Flanders, Anna R., Morristown.
 Ford, Charlotte W., Morristown.
 Forster, William S., Flanders.
 Foster, G. W., Rockaway.
 Gorton, Eliot, Morristown.
 Green, Alonzo, Chester.
 Griswold, James B., Morristown.
 Hann, P. S., Dover.
 Henriques, H. A., Morristown.
 Houston, J. C., Mendham.

LIST OF PHYSICIANS.

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Kice, H. W., Port Oram.
 Lewis, A. A., 64 South street, Morristown.
 Lumsden, R. C., Rockaway.
 Mallon, P. S., Morris Plains.
 Martin, William H., Madison.
 McCarroll, H. B., Morristown.
 Mial, L. L., Morristown.
 Miller, Charles N., Flanders.
 Miller, John, Netcong.
 Newbold, Herman A., Morristown.
 Newcombe, Dr., Pompton Plains.
 O'Reilly, Harry M., Morristown.
 Owen, F. W., Morristown.
 Pierson, Stephen, Morristown.
 Prout, T. P., Morris Plains.
 Reed, Stuart H., Madison.
 Romont, C. D. V., Pompton Plains.
 Ryerson, J. G., Boonton.
 Scarborough, Charles W., Madison.

Shippe, David, Butler.
 Simpson, M. S., Middle Valley.
 Stiger, John S., Mendham.
 Sutton, Edward, German Valley.
 Swain, George M., Chatham.
 Taylor, J. L., Boonton.
 Uebelacker, A., Morristown.
 Upchurch, H. C., Kenvil.
 Vaughan, Harry, Morristown.
 Walters, Daniel, Port Oram.
 Walters, John, Port Oram.
 Wheeler, H. S., Whippany.
 Wigg, Cuthbert, Boonton.
 Wilkinson, George W., Morristown.
 Wolfe, Theodore F., Succasunna.
 Wolfe, William J., Chatham.
 Woodruff, Mrs. H. M. C., Boonton.
 Wright, J. E., Morristown.

Ocean County.

Allen, Howard, New Egypt.
 Barrett, W. K., Manahawkin.
 Bennett, Edmund, Barnegat.
 Blake, D. W., Forked River.
 Brown, Frank, Manchester.
 Brown, Phoebe D., Lakewood.
 Brower, Frank, Manchester.
 Buckingham, F. S., Lakewood.
 Carrigan, E. S., Point Pleasant.
 Cate, H. H., Lakewood.
 Curtis, Frederick, Lakewood.
 Davis, William T., Tuckerton.
 Disbrow, E. C., Toms River.
 Disbrow, R. L., Toms River.
 Disbrow, V. M., Lakewood.
 Hance, I. H., Lakewood.
 Hawley, B. F., Bay Head.
 Heron, A. M., Lakewood.

Jones, Ralph, Toms River.
 Katzenbach, W. H., Bay Head.
 Kimball, Paul T., Lakewood.
 Laine, J. L., Manahawkin.
 Lindley, C. L., Lakewood.
 McMillan, W. G., Lakewood.
 Miller, D. J. Milton, Bay Head.
 Olmsted, J. B., Tuckerton.
 Price, T. T., Tuckerton.
 Price, William H., Lakewood.
 Reeves, M. V., Tuckerton.
 Schaffler, W. G., Lakewood.
 Schureman, I. C., Toms River.
 Turris, G. S., Burrsville.
 Van Horn, J. J., Lakewood.
 Wallace, Gilbert E., Forked River.
 Whitaker, Frank, Point Pleasant.
 Woodward Charles E., New Egypt.

Passaic County.

Agnew, Frank, 29 Hamilton street, Paterson.
 Alexander, Archibald F., 379 Totowa avenue, Paterson.
 Armstrong, Dr., Passaic.
 Armstrong, Robert H., 607 River street, Paterson.
 Atkinson, Jas. W., 111 N. Main street, Paterson.
 Badeau, Charles W., 54 Park avenue, Passaic.
 Balleray, George H., 115 Broadway, Paterson.
 Banta, John H., 119 Broadway, Paterson.
 Baum, Soma, 70 Second street, Passaic.
 Berdeau, Edith, 118 Ellison street, Paterson.
 Bibby, James S., 131 Market street, Paterson.
 Bisset, John J., 721 Broadway, Paterson.
 Blundell, Charles, Paterson.
 Blundell, William, 236 Main street, Paterson.

Borden, D. P., Hamilton and Ellison streets, Paterson.
 Bowden, David T., 117 Paterson street, Paterson.
 Brown, G. E., Bloomfield avenue, Passaic.
 Browne, J. A., Grand and Mill streets, Paterson.
 Bullen, Victor C., Ellison and Washington streets, Paterson.
 Campbell, C. M., 642 Main street, Paterson.
 Carlough, David S., Central Building, Paterson.
 Carr, Ada, Vreeland avenue, Paterson.
 Carroll, William H., 125 Jefferson street, Passaic.
 Case, M. V., 39 Lincoln street, Passaic.
 Chase, William E., 135 Main avenue, Passaic.

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- Church, Charles A., 128 Prospect street, Passaic.
 Colfax, William, Pompton Lakes.
 Corbin, L. C., 169 Jefferson street, Passaic.
 Coursen, T. D., West Milford.
 Coursen, W. S., West Milford.
 Crooks, James, 102 Washington street, Paterson.
 Crounse, D. R., 84 Bloomfield avenue, Passaic.
 Cummins, Mary G., 299 Summer street, Paterson.
 Curtis, James H., 30 Church street, Paterson.
 Curtis, R. M., 190 Van Houten street, Paterson.
 Datesman, H. F., 239 Bloomfield avenue, Passaic.
 Day, H. V., Bloomingdale
 De Baun, Edwin, 141 Main avenue, Passaic.
 De Jager, S., Broadway, Paterson.
 Demarest, F. F. C., 29 Academy street, Passaic.
 Denner, Edward F., 155 Ellison street, Paterson.
 Dittmer, Wm. C., 64 N. Main street, Paterson.
 Drews, Hugo, Second street, Passaic.
 Dunning, Walter L., 700 E. Eighteenth street, Paterson.
 Emerson, Herbert, 81 Broadway, Paterson.
 Faulkner, James N., 197 Market street, Paterson.
 Fischer, George, Bridge and Fair streets, Paterson.
 Fitzmaurice, Thomas J., 133 Beech street, Paterson.
 Flitcroft, William, River street, Paterson.
 Garnett, O. V., 154 Straight street, Paterson.
 George, Roger P., 676 E. Twenty-fourth street, Paterson.
 Gillson, John T., 391 Main street, Paterson.
 Gillson, M. W., 89 Ward street, Paterson.
 Grabowski, Dr., Passaic.
 Green, William S., 362 Totowa avenue, Paterson.
 Harris, P. A., 26 Church street, Paterson.
 Hegeman, John A., 200 Pennington avenue, Passaic.
 Henggeler, Jacob, 47 Bridge street, Paterson.
 Henyan, Lucas E., 100 Fair street, Paterson.
 Johnson, W. B., 170 Broadway, Paterson.
 Kane, Charles J., 349 Grand street, Paterson.
 Kane, Thomas J., 349 Grand street, Paterson.
 Keller, Frank J., 475 Union avenue, Paterson.
 Kinne, T. Y. and P. S., 9 Church street, Paterson.
 Kip, Henry, Paterson street, Paterson.
 Kunstlich, A., Second street, Passaic.
 Kunstlich, D., Second street, Passaic.
 Leal, John L., 194 Broadway, Paterson.
 Lucas, H. H., 192 Van Houten street, Paterson.
 Luck, Emil P. M., 923 Main street, Paterson.
 Luck, Paul M. K., 99 Second street, Passaic.
 MacAllister, William W., Little Falls.
 Macintosh, M. A., 251 Straight street, Paterson.
 Macwithey, A. A., Pompton.
 Magennis, B. C., 150 Broadway, Paterson.
 Maines, R. G., West Milford.
 Marsh, E. J., Park avenue and E. Twenty-seventh street, Paterson.
 McBride, A. F., 397 Main street, Paterson.
 McCoy, John C., 153 Broadway, Paterson.
 Merrill, John R., 24 Church street, Paterson.
 Merrill, S. R., 15 Church street, Paterson.
 Meyers, C. F. W., 103 Broadway, Paterson.
 Millsbaugh, Daniel T., 25 Totowa avenue, Paterson.
 Morgan, E. B., 102 Washington street, Paterson.
 Morgan, J. C., Pompton Lakes.
 Neer, Rush, 85 Hamilton avenue, Paterson.
 Neer, William, 95 Hamilton avenue, Paterson.
 Newman, Arthur L., 147 Ellison street, Paterson.
 Newton, W. K., 379 Ellison street, Paterson.
 Norris, Charles E., 43 Westervelt Place, Passaic.
 Norval, William A., 419 Main street, Paterson.
 O'Donnell, James, 387 Main street, Paterson.
 O'Grady, Thomas F., 374 Grand street, Paterson.
 O'Shea, Joseph J., 51 Ward street, Paterson.
 Parke, Henry, 273 Main street, Paterson.
 Paton, Thomas L., 103 Broadway, Paterson.
 Paxton, John P., Auburn street, Paterson.
 Pedrick, A. C., 167 Jefferson street, Passaic.
 Pike, Horace V., Ward and Hotel streets, Paterson.
 Reynolds, H. C., 44 Grove street, Passaic.
 Ricardo, N. C., 57 Passaic avenue, Passaic.
 Rice, F. H., 79 Bloomfield avenue, Passaic.
 Rogers, A. W., 285 Broadway, Paterson.
 Rogers, Benjamin A., 113 Paterson street, Paterson.
 Ruppert, John H., 154 Market street, Paterson.
 Ryan, John N., 27 McLean street, Passaic.
 Scribner, Charles H., 53 Ward street, Paterson.
 Seward, Dr., Bloomfield avenue, Passaic.
 Shipper, David W., Wanaque.
 Smith, James W., 33 Clark street, Paterson.
 Smith, William R., Little Falls.
 Solatinow, Jacob, 51 Hamilton avenue, Paterson.
 Solatinow, Joseph, Paterson.
 Stagg, Frank M., Washington Place, Passaic.
 Stemmerman, W. H., Main avenue, Passaic.
 Stewart, Joseph M., 181 Van Houten street, Paterson.
 Stinson, Richard, 517 Broadway, Paterson.
 Struble, J. H., Passaic street, Passaic.
 Sullivan, D. W., Washington Place, Passaic.
 Sullivan, John, 320 Passaic avenue, Passaic.
 Surmann, Isaac, 53 Bridge street, Paterson.
 Synott, Martin J., Little Falls.
 Temple, A. H., 223 Main avenue, Passaic.
 Terhune, Percy H., 162 Gregory avenue, Passaic.
 Terhune, Richard A., 162 Gregory avenue, Passaic.

Terriber, George W., 146 Broadway, Paterson.
 Todd, F. H., Broadway and Church streets, Paterson.
 Townsend, S. C., 105 Fair street, Paterson.
 Van Dalsen, Spencer, 41 Bridge street, Paterson.
 Van Riper, A. Ward, Main avenue, Passaic.
 Van Riper, Cornelius, 207 Main avenue, Passaic.
 Van Schott, G. J., 135 Lexington avenue, Passaic.
 Vigna, Fortunato, 85 Ward street, Paterson.
 Van Vranken G., 20 Pennington avenue, Passaic.

Vreeland, Frank D., 316 Broadway, Paterson.
 Vreeland, George W., 21 Rip Van Winkle avenue, Paterson.
 Welsh, George F., Passaic avenue, Passaic.
 Whitey, A. A., Pompton.
 Wiley, S. W., 141 Ward street, Passaic.
 Willard, Harry S., 102 Washington street, Paterson.
 Williams, H., 150 Monroe street, Passaic.
 Williams, J. W., 257 Graham avenue, Paterson.
 Wolfe, Aaron K., Totowa and Wayne avenues, Paterson.

Salem County.

Allen, L. A. D., 69 N. Main street, Woodstown.
 Atkinson, C. P., Palatine.
 Barnhart, Newton H., Penns Grove.
 Beckett, A. T., Salem.
 Bilderback, Francis, Salem.
 Black, Allen B., Pedricktown.
 Campbell, John, Elmer.
 Carpenter, William H., Salem.
 Cheeseman, C. P., Elmer.
 Chevanne, Henry, 297 E. Broadway, Salem.
 Conover, J. V., Elmer.
 Davis, R. M., 260 E. Broadway, Salem.
 De Grofft, E. E., Woodstown.
 Ewen, Warren L., Alloway.
 Fitch, George W., Daretown.
 Flanagan, Henry M., Penns Grove.
 Garrison, Daniel, Penns Grove.
 Gillman, Uriah, Woodstown.
 Good, William T., Quinton.
 Groff, John H., Penns Grove.
 Harris, F. B., Canton.
 Hires, N. S., 69 Market street, Salem.

Jackson, Henry, 88 Market street, Salem.
 James, William H., Pennsville.
 Johnson, Harry T., Pedricktown.
 McGeorge, Emerson, Woodstown.
 Miller, L. H., Woodstown.
 Moore, David, Penns Grove.
 Newton, Charles, Sharptown.
 Patterson, J. A., Salem.
 Rogers, H. W., Elmer.
 Sharpe, E. S., Salem.
 Sherron, C. M., Broadway, Salem.
 Smith, Ellen B., Salem.
 Smith, W. Scott, Salem.
 Souder, P. G., Woodstown.
 Stilt, William F., Walnut street, Salem.
 Summerhill, John, Penns Grove.
 Taylor, Sarah, Woodstown.
 Trist, E. A., Salem.
 Waddington, B. A., 260 E. Broadway, Salem.
 Wiley, David, Salem.
 Woodruff, A. B., Elmer.

Somerset County.

Adams, Daniel C., North Plainfield.
 Anderson, J. E., Neshanic.
 Beekman, J. B., Pluckamin.
 Buchanan, J. Hervey, North Plainfield.
 Cooley, J. H., North Plainfield.
 Cooper, J. Howard, Middlebush.
 Davis, E. C., Bound Brook.
 Davis, H. V., North Branch.
 Farrow, E. F., Peapack.
 Field, Frank L., East Millstone.
 Fisher, C. R. P., Bound Brook.
 Flynn, T. H., Somerville.
 Gaston, Mary, Somerville.
 Hecht, J. P., Somerville.
 Henry, George, Somerville.
 Jones, Fred., Basking Ridge.
 Lanning, L. M., Somerville.
 Long, W. H., Jr., Somerville.
 Mathews, B. B., Bound Brook.
 Mattison, W. E., North Plainfield.

McConaughy, Francis, Somerville.
 McWilliams, J. F., Somerville.
 Merrell, William H., South Branch.
 Mosher, Abram B., Griggstown.
 Nixon, Warford L., Raritan.
 Pittis, Emerson, North Plainfield.
 Reed, L. T., Somerville.
 Robinson, J. T., South Bound Brook.
 Skillman, Thomas A., Harlingen.
 Smalley, M. C., Gladstone.
 Stillwell, A. L., Somerville.
 Sutphin, Fred. C., Bernardsville.
 Swinton, W. J., Somerville.
 Taylor, S. O. B., Millstone.
 Ten Eycke, J. D., Franklin Park.
 Voorhees, A. F., Basking Ridge.
 Weeks, Henry M., Skillman.
 Wild, Fred. E., Bound Brook.
 Zeglio, P. J., 48 Somerset street, North Plainfield.

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Sussex County.

Allen, J. M., Deckertown.
 Andrus, T. H., Sparta.
 Armstrong, M. N., Newton.
 Beatty, E. E., Newton.
 Brooker, John B., Newton.
 Burd, L. C., Ogdensburg.
 Cassidy, A. W., Stillwater.
 Clark, Jephtha C., Andover.
 Cole, Martin, Jr., Hainesville.
 Coleman, Joseph G., Lafayette.
 Couse, J. P., Hamburg.
 Dalrymple, Edw. S., Branchville.
 Davison, C. H., Stanhope.
 Dowling, C. E., Sparta.
 Dunning, Charles M., Coleville.
 Furgeson, Benjamin W., Deckertown.
 Hamilton, J., Newton.
 Hedges, Joseph, Branchville.

Hood, Bruno, Newton.
 Hughes, Margan D., Layton.
 Jacobus, P. W., Newton.
 McCloughn, J. H., Swartswood.
 Miller, J. N., Newton.
 Moore, John, Deckertown.
 Morrison, Ephraim, Newton.
 Nelden, C. R., Stanhope.
 Pellet, J. B., Hamburg.
 Potter, E. B., Newton.
 Price, J. Cole, Branchville.
 Rosenberg, L., Andover.
 Stader, John C., Lafayette.
 Straley, S. B., Andover.
 Van Gaesbeck, H. D., Deckertown.
 Voorhees, Shepard, Newton.
 Woolfe, Joseph, Colesville.

Union County.

Allen, W. Cornell, Cranford.
 Allen, W. C., 159 Crescent avenue, Plainfield.
 Allen, Wilforce, Cranford.
 Ard, F. C., Plainfield.
 Bailey, Frederick R., 1165 E. Jersey Street, Elizabeth.
 Bailey, G. W., 1165 E Jersey street, Elizabeth.
 Banker, Pierre A., 1156 Jersey street, Elizabeth.
 Berg, J. F., Plainfield.
 Blair, James A., Roselle.
 Boone, W. C., Plainfield.
 Brown, L. R., 23 W. Jersey street, Elizabeth.
 Brown, Stanley R., 287 N. Broad street, Elizabeth.
 Browning, W. Kempton, E Fifth street, Plainfield.
 Buchanan, J. H., 48 Duer street, Plainfield.
 Bunting, P. D., 88 Third street, Elizabeth.
 Burling, John, Summit.
 Burnett, T. H., 284 N. Broad street, Elizabeth.
 Carman, J. H., Plainfield.
 Cladek, W. E., Rahway.
 Clawson, M. L., Plainfield.
 Coles, J. Ackerman, Scotch Plains.
 Conover, John H. P., 342 Westminster avenue, Elizabeth.
 Cooper, Sherman, Westfield.
 Cory, A. M., New Providence.
 Crouthers, Anna, 1120 E. Jersey street, Elizabeth.
 Currie, N. W., W. Fifth and New streets, Plainfield.
 Davis, Thomas S., Plainfield.
 Desmond, Lawrence P., 142 Court street, Elizabeth.
 Dolan, Thomas E., 129 Livingston street, Elizabeth.

Donovan, Alfred Q., 188 E. Jersey street, Elizabeth.
 Dundon, Arthur H., Plainfield.
 Endicott, G. W., 621 Park avenue, Plainfield.
 Fritts, J. T., 423 Park avenue, Plainfield.
 Gale, William, Westfield.
 Galloway, George E., Rahway.
 Gaston, W. F., Plainfield.
 Gray, John W., 10 Highland avenue, Summit.
 Green, James R., 468 N. Broad street, Elizabeth.
 Grier, E. B., 1145 E. Jersey street, Elizabeth.
 Hallock, F., Plainfield.
 Hamil, R. H., Summit.
 Hannath, William H. W., Roselle.
 Harris, T. W., Springfield.
 Harrison, Joseph B., Westfield.
 Hedges, B. Van D., 703 Watchung avenue, Plainfield.
 Hedges, E. W., 708 Watchung avenue, Plainfield.
 Holmes, C. B., Rahway.
 Hough, H. Page, Rahway.
 Jenkins, O. L., Plainfield.
 Keefe, S. J., 1085 Elizabeth avenue, Elizabeth.
 Keenan, J. H., 22 W. Jersey street, Elizabeth.
 Keeny, Sarah D., Plainfield.
 Kinch, Fred. A., Jr., Westfield.
 Lawrence, William H., Summit.
 Leary, Joanna, 130 Jefferson avenue, Elizabeth.
 Livengood, Horace R., 228 Elizabeth avenue, Elizabeth.
 Livengood, T. L., 1164 E. Jersey street, Elizabeth.
 Long, M. B., Plainfield.
 Lowrie, H. H., 516 Park avenue, Plainfield.
 Lufburrow, C. B., 327 W. Front street, Plainfield.

LIST OF PHYSICIANS.

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- Matthewson, William B., W. Front street, Plainfield.
 McConnell, Joseph, Cranford.
 McConnell, William, Cranford.
 McLean, T. N., 1144 E. Broad street, Elizabeth.
 Montfort, Robert, 1051 E. Jersey street, Elizabeth.
 Morrison, Caldwell, Summit.
 Morse, Willard H., 49 Elm street, Westfield.
 Morton, Joseph, 274 N. Broad street, Elizabeth.
 Mravlag, Victor, 1062 E. Jersey street, Elizabeth.
 Murray, W. H., 737 Watchung avenue, Plainfield.
 O'Reilly, E. R., 167 Second street, Elizabeth.
 Peck, George, 926 N. Broad street, Elizabeth.
 Pettis, Albert, 49 Somerset street, Plainfield.
 Pettit, Alonzo, 116 W. Grand street, Elizabeth.
 Pierson, Frederick H., 444 N. Broad street, Elizabeth.
 Pierson, Henry C., Roselle.
 Probasco, John B., 175 E. Front street, Plainfield.
 Probasco, Norman H., 175 E. Front street, Plainfield.
 Quinn, Stephen T., 1134 E. Jersey street, Elizabeth.
 Randolph, John M., Rahway.
 Reilly, J. P., 215 Elizabeth avenue, Elizabeth.
 Risk, J. Boyd, Summit.
 Risk, W. H., Summit.
 Rushmore, E., Plainfield.
 Schlichter, Charles H., 1053 Elizabeth avenue, Elizabeth.
 Sell, F. W., Rahway.
 Selover, W. U., Rahway.
 Shirrefs, Russel A., 1158 E. Jersey street, Elizabeth.
 Silvers, Elihu B., Rahway.
 Sindair, Robert R., Jr., Westfield.
 Smith, T. V., Westfield.
 Steadling, Frank, Rahway.
 Stern, Arthur, 218 E. Jersey street, Elizabeth.
 Stillman, Martha, 110 W. Fourth street, Plainfield.
 Stites, J. A., Springfield.
 Strickland, George W., Roselle.
 Terrill, Thomas, 826 Elizabeth avenue, Elizabeth.
 Tomlinson, T. H., 212 La Grand avenue, Plainfield.
 Turner, W. F., 137 Catherine street, Elizabeth.
 Van Horn, A. F., 452 W. Fifth street, Plainfield.
 Voorhees, Nathaniel W., 297 N. Broad street, Elizabeth.
 Westcott, F. W., Fanwood.
 Westfall, E. J., Rahway.
 Whitehead, R. B., 36 Third street, Elizabeth.
 Wilson, N. L., 822 N. Broad street, Elizabeth.
 Younglove, John, 467 Jefferson street, Elizabeth.

Warren County.

- Albertson, W. C., Belvidere.
 Allen, Gertrude, Hackettstown.
 Allen, William C., Delaware.
 Baird, William M., Warrington.
 Barber, Isaac, Phillipsburg.
 Barber, Thomas, Phillipsburg.
 Beasley, Nellie E., Belvidere.
 Bergen, E. J., Washington.
 Bieber, L. D., Phillipsburg.
 Burd, William H., Belvidere.
 Carhart, Harry L., Blairstown.
 Cline, C. H., Hackettstown.
 Cook, John S., Hackettstown.
 Cox, H. M., Washington.
 Creveling, Charles F., Phillipsburg.
 Creveling, Philip G., Broadway.
 Cummings, G., Wyckoff, Belvidere.
 Curtis, Frank W., Stewartsville.
 Dewitt, James D., Harmony.
 Farrow, Levi, Hackettstown.
 Founk, Harry S., Port Murray.
 Griffith, J. H., Phillipsburg.
 Haggerty, F. W., Vienna.
 Haggerty, L., Danville.
 Hann, Laura, Washington.
 Hoagland, L. B., Oxford.
 Huges, Dr., Centreville.
 Jacobus, P. N., Washington.
 Jacoby, A. P., Phillipsburg.
 Johnson, John C., Blairstown.
 Johnson, S. H., Asbury.
 Kline, William, Phillipsburg.
 LaRieu, T. J., Asbury.
 Lefferts, F. P., Belvidere.
 Martin, A. E., Hackettstown.
 McGee, W. H., Belvidere.
 McKinstry, F. P., Washington.
 Miller, John, Hope.
 Morris, Theodore F., Belvidere.
 Osmun, L. C., Hackettstown.
 Reese, J. M., Phillipsburg.
 Rorback, F., Johnsonburg.
 Smith, C. B., Washington.
 Stewart, R. A., Phillipsburg.
 Swartsweller, Peter E., Belvidere.
 Tunison, G. O., Oxford.
 Vansyckle, A. C., Hackettstown.
 Warrington, Dr., Columbia.
 West, H. R., Phillipsburg.
 Williams, Charles M., Washington.
 Young, G. C., Washington.

List of Coroners

Atlantic County—George W. Swift, Lewis H. Smith, Albert C. Stephany.
Bergen County—Charles S. Robertson, Charles Hoffman, Willis W. Curry.
Burlington County—Barclay C. Seeds, Joshua D. Janney, Thomas S. Wells.
Camden County—Frank N. Robinson, Henry S. Gaskill, Paul N. Litchfield.
Cape May County—J. Stratton Ware, Edward F. Duncan, George Sayre, Jr.
Cumberland County—Clayton McPherson, Herbert L. Cooper, Ferdinand Jones.
Essex County—James H. Grant, Joseph M. Malesta, Otto C. Fischer.
Gloucester County—William H. Miller, Harry A. Stout, Charles S. Heritage.
Hudson County—William N. Parslow, Stephen F. Wyse, John Gschwind.
Hunterdon County—Edgar Allen, Peter D. Rockafellow, David Treftz.
Mercer County—John R. D. Bower, Edmund R. Nutt, James B. Clugston.
Middlesex County—Arthur L. Smith, John Albright, Frank C. Henry.
Monmouth County—Edgar I. Vandever, John Flock, John T. Tetley.
Morris County—James Hagan, Samuel Leonard, George C. Coates.
Ocean County—John Hagaman, Harry C. Shoemaker, Benjamin P. Bussom.
Passaic County—John S. Yates, Tunis Vermeulen, George McGlory.
Salem County—James D. Torton, John McDonnol, George W. Fitch.
Somerset County—C. R. P. Fisher, Mahlon C. Smalley, Frank L. Field.
Sussex County—Charles E. Dowling, Charles M. Dunning, Bruno Hood.
Union County—John W. Gray, P. DuBois Bunting, Horace R. Livengood.
Warren County—Clinton Kerr, Peter F. Hagerty, Charles N. Shrope.

Contagious Diseases of Animals.

In the report for the year ending November 30th, 1900, allusion was made to the fact that an unusual number of cases of glanders had been reported from various parts of Essex county. It was apparent that there must be some central point from which these cases were emanating, and investigation showed that extensive work had been carried on in the improvement of roads in various parts of Essex county, and that glanders had been introduced by infected horses brought into the county to be used in road making. W. F. Harrison, D.V.S., of Bloomfield, was requested by the State Board of Health to take charge of this district, and to make a full examination of all stables, for the purpose of discovering cases and to take the necessary action for the destruction of the animals where the disease existed. The ground was covered rapidly and a number of cases were discovered.

During the year ending November 30th, 1901, a report was received from Gloucester county that several cases of a suspicious nature had occurred among cattle, and the attending veterinarian feared that the animals which had died had contracted anthrax. An immediate investigation of the locality was ordered, and specimens which were sent to the laboratory from the diseased animals showed that anthrax was not present.

The following is a statement of the cases of contagious diseases of animals brought to the attention of the State Board of Health during the year ending November 30th, 1901, together with the action taken in each case.

December 1st, 1900, W. F. Harrison, D.V.S., of Bloomfield, reported a case of glanders at Verona; owner, Mr. McWade. The animal was destroyed and the premises disinfected under the direction of the veterinarian.

December 5th, 1900, Dr. Fell, Health Officer of Trenton, reported an outbreak of tuberculosis among cows owned by Henry Satterthwait, of Fallsington, Pennsylvania. Eighteen animals were affected,

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and were destroyed under the direction of the Trenton city board of health.

December 5th, 1900, D. W. Benjamin, Health Officer of Jersey City, reported that thirteen horses were affected with glanders in the stables of the Windsor Trucking Company, of Jersey City. These animals were destroyed by Dr. Mathews, veterinarian, under the direction of the local and State boards of health.

December 5th, 1900, D. W. Benjamin, Health Officer of Jersey City, reported a case of glanders at the National Storage Company's stables, and the animal was destroyed under the direction of E. Mathews, D.V.S.

December 6th, 1900, a case of glanders was reported at Washington avenue, Bloomfield. The owner was Mr. Ramsey. The animal died.

December 10th, 1900, two cases of hydrophobia were reported as existing at Jobstown. The owner was Abram Ege. Both animals died.

December 13th, 1900, D. D. Chandler, Health Officer of Newark, reported a case of glanders at Reinhart's Express stables. The animal was destroyed by the owners, and the premises disinfected under the direction of the city board of health.

December 14th, 1900, two cases of rabies were reported upon the premises of George Frace, Norton, Hunterdon county. E. R. Voorhees, D.V.S., of Somerville, was sent to advise with the owner as to the proper action to be taken.

December 24th, 1900, E. Mathews, D.V.S., Jersey City, reported a case of glanders at 436 Grand street, Jersey City, the owner being J. P. Moran. The animal was destroyed and the premises disinfected under the direction of Dr. Mathews.

December 24th, 1900, W. F. Harrison, D.V.S., reported a case of glanders at Clinton, west of Caldwell. The animal was destroyed and the premises disinfected.

December 26th, 1900, James J. McDonough reported a case of glanders upon the premises of Frank Goodrich, Verona, and that six animals had been exposed to the disease. The case that was reported died, and the premises were thoroughly disinfected.

December 27th, 1900, several cases of spinal meningitis in horses were reported as existing upon the premises of George Harley, of Clementon, Gloucester county, New Jersey. Two animals died.

January 4th, 1901, W. F. Harrison, D.V.S., reported two cases of glanders in animals owned by Stiles Van Ness, Horse Neck, New Jersey. The horses were destroyed under the direction of the veterinarian and the premises disinfected.

January 4th, 1901, W. F. Harrison, D.V.S., reported a case of glanders at Verona, upon the premises owned by James Harkey. The animals were destroyed under the supervision of the veterinarian and the premises disinfected.

January 4th, 1901, Dr. Harrison reported a case of glanders upon the premises of Frank Goodrich, Verona. The animal was destroyed and the premises disinfected.

January 8th, 1901, six cases of varicella were reported to the board as existing upon the premises owned by J. H. Darrah, and located near Lawrenceville, Mercer county, New Jersey. An examination was made by E. R. Voorhees, D.V.S., of Somerville, and a diagnosis of varicella rendered. The owner had already separated the infected cattle from the rest of the herd, and had taken prompt action to prevent any spread of the disease.

January 10th, 1901, E. R. Voorhees, D.V.S., Somerville, reported a case of glanders on the premises of John O'Mara, Montclair. The animal was killed and the premises disinfected.

January 11th, 1901, W. F. Harrison, D.V.S., reported a case of glanders upon the premises of Charles Bahr, Verona. The animal was destroyed and the premises disinfected under the supervision of the veterinarian.

January 12th, 1901, Mr. West, of Metuchen, reported a case of glanders upon his premises. Dr. Pocock, of Plainfield, and E. R. Voorhees, D.V.S., Somerville, examined the case, and the animal was destroyed. The horses that had been exposed to the disease were examined from time to time until all danger of infection was past.

January 16th, 1901, Mr. Leighton, Health Officer of Montclair, reported a case of glanders upon the premises of David Howell, St. Luke's Place, Montclair. The animal was destroyed under the direction of W. F. Harrison, D.V.S., and the premises disinfected.

January 17th, 1901, D. D. Chandler, Health Officer of Newark, reported a case of glanders upon the premises of E. C. Hay, Plum Point lane, Newark, New Jersey. The animal was destroyed under the supervision of the city board of health and the premises disinfected.

January 21st, 1901, D. D. Chandler, Health Officer of Newark, reported a case of glanders at Mangel & Schmidt's, Hunterdon and Thirteenth streets, Newark, New Jersey. The animal was destroyed under the direction of W. Runge, D.V.S., and the premises were disinfected.

January 21st, 1901, D. D. Chandler, Health Officer of Newark, reported a case of glanders upon the premises of Mr. Bishop, 192 Newark street. The animal was destroyed by the owner and the premises disinfected under the supervision of W. Runge, D.V.S.

January 25th, 1901, R. S. Van Dyke reported a case of glanders upon the premises of W. T. Regee, Maple avenue, Morristown. E. R. Voorhees, D.V.S., of Somerville, confirmed the diagnosis. The animal was destroyed and the premises disinfected under the supervision of the local board of health.

January 27th, 1901, W. F. Harrison, D.V.S., reported two cases of glanders upon the premises of J. S. Van Nest, Clinton. The animals were destroyed and the premises disinfected under the supervision of the veterinarian.

January 30th, 1901, W. F. Harrison, D.V.S., reported a case of glanders upon the premises of Andrew Parkhurst, Verona. The animal was destroyed and the premises disinfected.

February, 1901, W. F. Harrison, D.V.S., reported a case of glanders upon the premises of Frederick Fierst, West Orange. The animal was destroyed and the premises disinfected.

April 14th, 1901, W. F. Harrison, D.V.S., reported a case of glanders, the owner being W. F. Alworth, Montclair. Dr. McDonough, of Montclair, was in attendance. The animal was destroyed and the premises disinfected.

May 23d, 1901, W. F. Harrison, D.V.S., reported a case of glanders at Savali's, 63 Freeman street, Orange. The animal was destroyed and the premises disinfected.

June 19th, 1901, W. F. Harrison, D.V.S., reported a case of glanders upon the premises of Mr. Personette, Cedar Grove. The animal had been destroyed by the owner, and the premises were disinfected under the supervision of the veterinarian.

June 19th, 1901, W. F. Harrison, D.V.S., reported a case of glanders upon the premises of H. Parkhurst, Verona. The animal was destroyed and the premises disinfected.

June 19th, 1901, W. F. Harrison, D.V.S., reported a case of

glanders at J. J. Vreeland's, Cedar Grove. The animal was destroyed and the premises disinfected, and horses which had not been exposed to the disease were removed to other premises.

August 2d, 1901, W. F. Harrison, D.V.S., reported a case of glanders at 376 Plane street, Newark. The animal was destroyed and the premises disinfected.

August 24th, 1901, W. F. Harrison, D.V.S., reported a case of glanders at Orange Valley. The animal was owned by C. L. Shipman, 293 South Jefferson street, Orange. The horse was destroyed and the premises disinfected.

August 31st, 1901, W. F. Harrison, D.V.S., reported a case of glanders upon the premises of M. Hoey, Mechanic street, Orange. The animal was destroyed and the premises disinfected.

August 31st, 1901, W. F. Harrison, D.V.S., reported a case of glanders upon the premises of Bergen Holey, South Jefferson street, Orange. The animal was destroyed and the premises disinfected.

September 4th, 1901, T. B. Rogers, D.V.S., reported that three cows had died upon the premises of John Costello, living near Woodbury, and as anthrax had existed in this neighborhood within two years, it was thought that possibly the deaths might have been caused by that disease. A specimen was sent, by Dr. Rogers, to the State Bacteriological Laboratory in Princeton, for examination. The result of the examination was negative.

September 17th, 1901, D. D. Chandler, Health Officer of Newark, reported a case of glanders on the premises of Koch & Company, Academy street, Newark. The animal was destroyed under the supervision of the State Board of Health and the premises disinfected.

September 28th, 1901, two cases of glanders were reported by Mr. Schluer, Health Officer of Orange. The animals were destroyed and the premises disinfected.

November 2d, a case of glanders was reported in Jersey City by D. W. Benjamin, Health Officer. The animal was destroyed and the premises disinfected.

November 3d, Dr. Harrison, D.V.S., of Bloomfield, reported a case of farcy on the premises of Charles Feint, of Salem. The animal was destroyed and the premises were disinfected.

December 19th, a case of glanders was reported by A. Woods, secretary of the board of health of Little Ferry. The animal was destroyed and the premises were disinfected.

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December 30th, J. Payne Lowe, D.V.S., reported a case of glanders at 65 Second street, Passaic. The animal was destroyed and the stable was disinfected.

Summary of cases receiving attention during the year :

	Number of cases.
Glanders.....	52
Tuberculosis.....	18
Hydrophobia.....	4
Bovine Varicella	6
Anthrax—Three cases reported but diagnosis was not confirmed.	

Laboratory of Hygiene.

REPORT OF BACTERIOLOGIST.

To the Board of Health of the State of New Jersey:

GENTLEMEN—I have the honor to make the following report on the work of this laboratory during the year ending October 1st, 1901.

The management of the laboratory and the conduct of the work have continued in general as in previous years. The methods of making reports to physicians and keeping records have not been materially changed.

The mailing cases used for sending specimens to the laboratory for examination in suspected cases of diphtheria and tuberculosis have not been changed, except that an improvement was obtained at the beginning of the year in the sputum jar used in the tubercle mailing cases. They are now eminently satisfactory, except that a reduction in size might be made with advantage. The packages formerly used for blood for Widal's test for typhoid fever were found unsatisfactory, and a change was made at the beginning of the year. Instead of paper, glass slides inclosed in wooden boxes and heavy envelopes are now used. This has proved a great advantage over the former method, but is still unsatisfactory in some cases. We hope in the near future to send out plasters and glass tubes for blister serum for these tests.

Specimens are occasionally received without the clinical report properly filled out. In some cases no data whatever is given, or the post-office address of the sender of the specimen is omitted. Such cases are located and reports sent when it is possible to do so; but where no data are given or the physician is unknown, it is impossible to report unless a complaint or inquiry is received, which does not always occur. There were thirteen such cases during the year, which are included in the table (Table I.) under "County unknown."

It is our aim to make the services of the laboratory conveniently

accessible to every physician and health officer in the State who desires our aid. Repositories have been established at drug stores, hospitals, board of health offices and private physicians' offices in nearly every town of considerable size in the State, as well as in many of the smaller towns and country villages. New repositories are established whenever and wherever we find a demand for our mailing-cases. During the year eighty new stations were established and a few changes were made in the old list of repositories. The list which follows is corrected and complete to October 1st, 1901.

As in previous years, the work of the laboratory has consisted in bacteriological examination of specimens sent in by the physicians and health officers of the State. The diseases for which examinations are made most frequently are diphtheria, tuberculosis, typhoid fever, malaria and gonorrhœa, in the order named. They are described in detail in the tables that follow. The examinations for diphtheria are for two purposes—first, for diagnosis, and, second, to determine the discontinuance of the presence of the infection. The majority of the primary examinations may be assumed to be for the former purpose, and of the secondary for the latter. In many cases, however, the physicians rely upon the clinical evidence for diagnosis and treatment, and depend upon bacteriological examination only to determine when the patients may safely be released from isolation. Nearly all of the examinations for the other diseases are for the purpose of diagnosis.

In the vast majority of cases the methods employed and the results obtained are eminently satisfactory when the directions given are accurately followed in preparing and sending specimens. But this is not always done. Careless preparation of specimens occasions much inconvenience in the laboratory work, and many failures to obtain good results are attributable to this cause. Physicians occasionally send, or allow their patients to send, specimens, with no regard to the direction nor the requirements for a satisfactory examination.

More or less inaccuracy is inevitable even when fairly good specimens are furnished. In cases of diphtheria, unless great care is taken to get a thorough swabbing of false membrane itself, good cultures may not be obtained, and for this reason, or because mixed infection with other bacteria predominating, a few bacilli may escape detection. In cases of tuberculosis, where the sputum is not highly infectious, the few bacilli present may escape detection if a sufficient amount of

Bronchial excreta is not furnished, or if it is mixed with an excessive amount of saliva or pharyngeal excreta. In cases of typhoid fever the blood often fails to react during the first days of the disease, and sometimes will not react until well along toward convalescence. In several cases reactions have been obtained on the second or third examination, when the first or second examination failed to give a reaction. Hence, negative results, especially within the first five or six days of the disease, should not be regarded as proof that the case is not one of typhoid fever. Specimens for malaria especially require very careful preparation.

A few examinations have been made for diseases and infections other than those above mentioned. They are too few in number and too various in character to be well classified or included in the tables which follow. They include examinations for anthrax, streptococcus, staphylococcus and various other bacterial infections, &c. A few articles and some dust were examined from rooms supposed to be infected with diphtheria and tubercle bacilli, with negative results.

The following tables describe in detail the work in connection with the five diseases most frequently examined. Table I. shows the number of examinations for the several diseases from each county and the entire State for each month and during the year, with items and totals. It will be seen that specimens are examined from every county, but that there are great differences in the numbers examined from the several counties. It will also be seen that at no time during the year has there been a let up in the work of the laboratory. During the month of the year when the fewest examinations were made there was an average of about ten a day, excluding Sundays, and during the busiest month there was a similar average of about sixteen a day.

Table II. shows the numbers of primary and secondary examinations for the several diseases, and also the numbers of positive, negative and doubtful results. Of the positive results, it shows how many occurred during the several months of the year. Table III. shows the number of examinations made for the several diseases and the totals for each of the last four years. It will be seen that the number of examinations is increasing from year to year, and that each year shows an increasing ratio.

TABLE I.

Showing the Number of Examinations for the Several Diseases by Months and Counties, with Sums and Totals.

COUNTIES.	Diseases.	MONTHS.											Entire year.	
		October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.		September.
Atlantic.....	Diphtheria	7	12	19	12	8	10	8	2	3	2	2	2	82
	Tuberculosis....	3	1	4	3	0	0	0	1	0	0	5	2	21
	Typhoid fever..	3	3	1	2	0	1	4	0	0	5	26	19	64
	Malaria.....	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gonorrhoea.....	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	18	16	24	17	8	11	7	3	3	9	33	23	167
Bergen.....	Diphtheria	1	6	21	16	2	8	3	11	5	9	2	2	92
	Tuberculosis....	8	4	4	8	6	9	6	3	9	9	10	7	88
	Typhoid fever..	7	2	5	4	5	3	0	3	1	8	8	13	59
	Malaria.....	0	0	0	1	0	0	1	0	0	0	0	0	2
	Gonorrhoea.....	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	22	12	30	29	13	20	10	22	15	26	20	22	241
Burlington	Diphtheria	3	23	22	1	2	5	3	7	2	4	0	1	73
	Tuberculosis....	3	4	4	5	3	4	4	6	3	7	2	3	48
	Typhoid fever..	1	6	0	2	0	3	1	0	0	1	1	3	18
	Malaria.....	0	0	0	1	0	0	0	0	0	1	0	3	5
	Gonorrhoea.....	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	7	33	26	9	5	12	8	13	5	13	3	10	144
Camden	Diphtheria	14	20	11	15	4	10	21	20	6	1	1	2	125
	Tuberculosis....	4	5	6	13	13	6	6	10	8	13	7	12	103
	Typhoid fever..	4	4	3	1	1	3	1	1	0	3	3	2	26
	Malaria.....	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gonorrhoea.....	1	0	0	0	0	0	0	0	0	0	0	0	1
	Total	23	29	20	29	18	19	28	31	14	17	11	16	255
Cape May.....	Diphtheria	0	0	0	1	0	0	0	0	0	0	0	0	1
	Tuberculosis....	1	1	0	0	0	0	0	0	0	1	1	0	4
	Typhoid fever..	0	0	0	0	0	0	0	0	0	0	0	1	1
	Malaria.....	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gonorrhoea.....	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1	1	0	1	0	0	0	0	0	1	1	1	6
Cumberland.....	Diphtheria	0	6	1	0	0	0	8	0	0	0	0	0	10
	Tuberculosis....	5	3	8	8	8	6	14	15	6	12	13	14	112
	Typhoid fever..	4	4	0	1	2	0	1	2	1	1	10	2	28
	Malaria.....	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gonorrhoea.....	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	9	13	9	9	10	6	18	17	7	13	23	16	150
Essex.....	Diphtheria	0	8	13	10	9	15	58	6	8	8	10	9	154
	Tuberculosis....	13	13	9	12	10	18	11	9	8	18	5	4	130
	Typhoid fever..	18	6	31	11	5	10	11	7	6	9	10	24	148
	Malaria.....	1	0	3	0	0	2	0	0	0	2	1	7	16
	Gonorrhoea.....	0	0	0	0	0	0	1	1	0	0	0	0	2
	Total	32	27	56	33	24	45	81	23	22	37	26	44	450
Gloucester.....	Diphtheria	0	4	12	4	0	1	2	0	0	0	0	0	23
	Tuberculosis....	2	2	2	2	0	1	2	4	2	6	0	0	17
	Typhoid fever..	0	0	1	0	0	0	0	0	0	0	1	0	2
	Malaria.....	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gonorrhoea.....	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2	6	15	6	0	2	4	4	2	6	1	0	42

TABLE I.—Continued.

Showing the Number of Examinations for the Several Diseases
by Months and Counties, with Sums and Totals

COUNTIES.	Diseases.	MONTHS.											Entire year.	
		October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.		September.
Hudson.....	Diphtheria	1	0	1	0	0	1	0	1	0	0	1	1	6
	Tuberculosis.....	1	3	5	8	7	5	5	6	5	4	2	6	57
	Typhoid fever.....	1	0	2	1	0	0	0	0	0	0	2	4	10
	Malaria	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gonorrhœa	0	0	0	0	0	0	0	0	0	1	0	0	1
	Total	3	3	8	9	7	6	5	7	5	5	5	11	74
Hunterdon	Diphtheria	2	1	0	0	0	1	1	0	1	0	0	0	6
	Tuberculosis.....	1	0	1	0	1	3	1	1	3	2	1	1	15
	Typhoid fever.....	0	1	0	0	0	0	0	0	0	1	0	2	4
	Malaria	0	0	0	0	2	0	0	0	1	4	1	2	10
	Gonorrhœa	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	3	2	1	0	3	4	2	1	5	7	2	5	35
Mercer.....	Diphtheria	6	7	26	18	71	10	5	29	27	7	3	0	209
	Tuberculosis.....	9	6	11	12	11	16	15	11	6	15	6	2	116
	Typhoid fever.....	5	4	3	12	8	6	3	9	2	5	13	18	92
	Malaria	1	1	3	2	1	1	0	0	1	0	0	3	13
	Gonorrhœa	2	1	2	0	2	4	2	3	1	0	0	0	17
	Total	23	19	45	44	93	37	25	52	37	27	22	23	447
Middlesex.....	Diphtheria	33	6	6	2	11	6	4	4	3	3	3	1	81
	Tuberculosis.....	0	2	4	4	7	10	7	6	3	7	5	2	57
	Typhoid fever.....	2	3	2	2	1	1	1	4	3	3	7	10	39
	Malaria	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gonorrhœa	0	0	0	0	0	0	0	0	1	1	0	1	3
	Total	35	10	12	8	19	17	12	14	10	14	15	14	180
Monmouth	Diphtheria	12	14	23	14	16	8	4	3	10	6	15	6	131
	Tuberculosis.....	4	6	10	3	4	7	11	12	7	7	11	10	92
	Typhoid fever.....	2	1	2	1	3	1	0	0	2	3	4	7	26
	Malaria	5	2	8	9	5	2	5	2	4	4	10	7	63
	Gonorrhœa	0	1	0	0	0	0	0	0	1	1	0	0	3
	Total	23	24	43	27	28	18	20	17	24	21	40	30	315
Morris.....	Diphtheria	6	3	5	11	11	3	8	4	3	2	6	4	67
	Tuberculosis.....	1	3	1	4	1	1	7	3	4	1	4	5	35
	Typhoid fever.....	0	0	1	0	0	2	0	0	0	1	0	1	5
	Malaria	0	0	0	0	0	0	0	0	0	2	0	0	2
	Gonorrhœa	0	0	0	0	0	0	0	0	0	1	0	0	1
	Total	7	6	7	15	12	6	15	7	7	8	10	10	110
Ocean.....	Diphtheria	0	0	0	0	0	0	0	0	0	1	0	0	1
	Tuberculosis.....	0	1	0	0	0	0	0	0	0	0	0	1	2
	Typhoid fever.....	0	0	0	0	0	0	0	0	0	0	0	0	0
	Malaria	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gonorrhœa	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	1	0	0	0	0	0	0	0	1	0	1	3
Passaic	Diphtheria	4	2	1	1	2	2	1	3	1	0	0	5	22
	Tuberculosis.....	2	5	6	3	5	7	8	7	6	6	7	14	76
	Typhoid fever.....	0	12	1	0	0	0	3	0	0	0	1	3	20
	Malaria	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gonorrhœa	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	6	19	8	4	7	9	12	10	7	6	8	22	118

TABLE I.—Continued.

Showing the Number of Examinations for the Several Diseases
by Months and Counties, with Sums and Totals.

COUNTIES.	Diseases.	MONTHS.											Entire year.	
		October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.		September.
Salem	Diphtheria	0	0	0	0	0	0	1	0	0	0	0	0	1
	Tuberculosis	5	0	1	3	0	2	0	1	1	1	0	0	14
	Typhoid fever	0	0	0	0	0	0	0	0	0	0	0	0	0
	Malaria	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gonorrhœa	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	5	0	1	3	0	2	1	1	1	1	0	0	15
Somerset	Diphtheria	2	6	0	3	10	7	0	0	1	0	0	3	34
	Tuberculosis	0	1	1	1	1	0	0	1	1	0	0	3	9
	Typhoid fever	0	0	0	1	2	1	0	0	1	1	0	2	8
	Malaria	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gonorrhœa	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2	7	1	5	13	8	0	1	3	1	1	9	51
Sussex	Diphtheria	6	12	16	13	6	0	2	1	1	1	8	4	70
	Tuberculosis	1	1	2	1	0	3	2	5	2	1	2	2	19
	Typhoid fever	0	0	0	0	0	0	0	1	1	0	0	3	5
	Malaria	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gonorrhœa	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	7	13	18	14	6	3	4	4	4	2	10	9	94
Union	Diphtheria	35	42	52	71	76	54	62	49	62	40	43	61	650
	Tuberculosis	11	14	17	26	19	19	15	14	11	14	5	14	179
	Typhoid fever	16	18	16	11	9	2	14	5	9	23	20	28	181
	Malaria	0	0	1	0	0	0	0	0	0	0	0	0	1
	Gonorrhœa	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	62	74	86	108	104	75	91	68	82	77	68	116	1,011
Warren	Diphtheria	4	0	2	0	0	1	0	0	0	4	3	4	18
	Tuberculosis	0	0	1	0	1	1	0	3	1	3	3	1	14
	Typhoid fever	0	0	0	0	0	0	0	0	0	0	1	0	1
	Malaria	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gonorrhœa	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	4	0	3	0	1	2	0	3	1	7	7	5	33
Unknown	Diphtheria	0	2	0	1	0	2	1	0	1	1	0	0	8
	Tuberculosis	0	0	0	0	0	1	0	0	0	0	1	1	3
	Typhoid fever	0	1	0	0	0	0	0	0	0	0	0	1	2
	Malaria	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gonorrhœa	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	3	0	1	0	3	1	0	1	1	1	2	13
Entire State	Diphtheria	142	173	231	193	228	144	182	140	134	90	98	109	1,864
	Tuberculosis	70	73	99	116	97	119	114	120	86	123	90	104	1,211
	Typhoid fever	67	65	68	49	36	33	39	32	26	61	107	153	739
	Malaria	8	3	15	13	8	5	6	2	6	13	12	22	113
	Gonorrhœa	3	2	2	0	2	4	3	4	3	4	0	1	28
	Total	290	316	415	371	371	305	344	298	255	291	307	389	3,955

TABLE II.

DISEASES.	RESULTS OF EXAMINATIONS.																			Total examinations.
	Primary examinations.	Second or later examinations from the same case.	POSITIVE.															Diagnosis not made or doubtful.		
			MONTHS.												Negative.					
			October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.		Year.				
Totals	3,158	797	158	133	191	152	143	103	89	126	98	111	132	146	1,582	2,268	105	3,955		
Diphtheria.....	1,214	620	90	85	117	97	101	48	33	65	59	35	54	41	828	988	48	1,864		
Tuberculosis.	1,142	67	34	25	44	33	30	47	43	49	34	55	42	50	486	711	14	1,211		
Typhoid fever.....	658	81	30	23	21	10	6	5	3	8	4	10	31	41	192	525	22	739		
Malaria.....	87	26	2	0	9	10	5	3	5	2	0	9	5	13	63	30	20	113		
Gonorrhoea.....	27	1	2	0	0	2	1	0	2	2	1	2	0	1	18	14	1	28		

Grand total	3,955
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TABLE III.

Showing the Number of Examinations for the Several Diseases and the Totals During Each of the Last Four Years, and Indicating Rapid Increase from Year to Year.

THE DISEASES INCLUDED.	YEARS ENDING OCTOBER FIRST.			
	1898.	1899.	1900.	1901.
Diphtheria.....	600	577	974	1,864
Tuberculosis.....	516	766	892	1,211
Typhoid fever.....	175	339	431	739
Malaria.....	4	*	53	113
Gonorrhœa.....	18	*	30	28
Totals.	1,313	*1,692	2,380	3,955

LIST OF REPOSITORIES

FOR SUPPLYING MAILING-CASES FOR THE USE OF PHYSICIANS IN SENDING SPECIMENS TO THE LABORATORY FOR EXAMINATION.

Allentown.....	Carslake's Pharmacy.
Alloway.....	Dr. W. L. Ewen.
Andover.....	Dr. J. C. Clark.
Annandale.....	Dr. W. E. Berkaw.
Arlington.....	Dr. J. A. Exton.
Asbury.....	Dr. F. J. La Riew.
Asbury Park.....	Board of Health.
Atlantic City.....	Board of Health.
Atlantic City.....	Atlantic City Hospital.
Atlantic City.....	A. D. Cuskaden, druggist.
Atlantic City.....	H. H. Deakyne, druggist.
Atlantic City.....	Wm. F. Ridgeway, druggist.
Atlantic City.....	W. C. Wescott, druggist.
Basking Ridge.....	Dr. F. C. Jones.
Bayonne.....	Frank N. L'Estrange, druggist.
Belleville.....	A. H. Osborne, druggist.
Belmar.....	Seaside Pharmacy.
Belvidere.....	Faust Bros, druggists.
Berlin	W. W. Miller, druggist.
Berlin	Board of Health.
Bernardsville.....	Dr. J. Meigh.
Beverly.....	Dr. A. W. Taylor.

* These numbers are not found in the annual report for the year and are not known, hence omitted, and the total is less by the omission.

Blairstown.....	Dr. W. C. Allen.
Bloomfield.....	Geo. M. Wood, druggist.
Boonton.....	Dr. Jno. L. Taylor.
Bordentown.....	Geo. M. Carslake, druggist.
Bound Brook.....	Chas. L. Manning, druggist.
Branchville.....	Dr. E. S. Dalrymple.
Bridgeton.....	Board of Health.
Bridgeton.....	A. S. Elwell, druggist.
Burlington.....	Jno. W. Davis, druggist.
Burlington.....	H. B. Weaver, druggist.
Caldwell.....	Dr. E. E. Bond.
Camden.....	Cooper Hospital.
Camden.....	Barret Bros, druggists.
Camden.....	Geo. M. Beringer, druggist.
Camden.....	Dr. R. I. Haines.
Camden.....	Dr. J. S. Baer, druggist.
Camden.....	F. S. Macpherson, druggist.
Camden.....	Geo. J. Pechin, druggist.
Cape May..	Dr. Anna M. Hand.
Cape May C. H.....	Dr. Julius Way.
Carlstadt.....	Dr. E. F. Sickenberger, Inspector.
Cedarville.....	Board of Health.
Chatham.....	Dr. Geo. M. Swain.
Chatham.....	Dr. W. J. Walfe.
Clayton.....	Dr. C. F. Fisher, druggist.
Closter.....	Dr. L. B. Parsell.
Collingswood.....	Wm. A. Chamberlin, druggist.
Columbus.....	Wells & Sons, druggists.
Crosswicks.....	Dr. C. L. Dey.
Deckertown.....	Dr. H. D. Van Gaasbeck.
Deerfield.....	Dr. L. B. Phillips.
Deerfield.....	Dr. E. S. Goudy.
Delanco.....	Dr. H. K. Weiler.
Dover.....	Robert Kilgore, druggist.
Dumont.....	Dr. J. E. Pratt.
Dunellen.....	Dr. P. W. Brakeley, druggist.
East Millstone..	J. C. Thatcher, druggist.
East Orange.....	F. L. Fieger, druggist.
Egg Harbor City.....	Board of Health.
Elizabeth.....	Board of Health, L. J. Richards.
Elizabeth.....	Elizabeth General Hospital.
Elizabeth.....	Richard Frohwein, druggist.
Elizabeth.....	Geo. J. Martin, druggist.
Elizabeth.....	Oliver & Drake, druggists.
Elizabeth.....	William H. Reibel, druggist.
Englewood.....	L. Rockefeller & Co., druggist.
Englewood.....	Reeder Bros. & Schneider, druggist.
Englishtown.....	Dr. W. E. Anderson.

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Fanwood	Dr. F. W. Westcott.
Farmingdale	Dr. W. R. Kinmouth.
Flemington	F. C Burk, druggist.
Freehold	Duryee & Conover, druggists.
Frenchtown	E M. Roche, druggist.
Gladstone	Dr. M. C. Smalley.
Glassboro	A. Trenchard, druggist.
Gloucester	Geo. B. Beakey, druggist.
Gloucester City	W. S. Hilliard, druggist
Hackensack	H. Hospital Association, Dr. D. St. John.
Hackensack	Eugene A. McFadden, druggist.
Hackettstown	C. V. Rea, druggist.
Haddonfield	R. Willard, druggist.
Hainsport	Dr. W. C. Parry.
Hammonont	B of H., Dr. Chas. Cunningham, Inspector .
Harrison, Hudson county	Squier's Pharmacy.
Hightstown	Dr H. Cunningham.
Hoboken	Board of Health.
Hoboken	William Kamlah, druggist.
Hoboken	Gustave Brandt, druggist.
Hoboken	Victor Schmidt & Co., druggists.
Hoboken	A. Schmidt, druggist.
Hoboken	Chas. Sunkel, druggist.
Hopewell	Geo. E. Pierson, druggist.
Imlaystown	Dr. F. C Price.
Jersey City	Maxwell Abernethy, druggist.
Jersey City	L E. Carpenter, druggist.
Jersey City	Frederick W. Frey, druggist.
Jersey City	John C. Gallagher, druggist.
Keyport	W. E. Wam, druggist.
Lambertville	S. W. Cockran & Co., druggists.
Lawrenceville	School.
Layton	Dr. M. D. Hughes.
Little Falls	S. Austen Reilly, druggist.
Long Branch	Board of Health, Dr. W. J. Smythe, Jr.
Long Branch	J. Rothenberg & Co., druggists.
Long Branch City	John T. Britton, druggist.
Madison	Wm. F. Brown, druggist.
Matawan	Board of Health.
Medford	Harry P. Thorn, druggist.
Mendham	Geo. Robinson, druggist.
Merchantville	J. W. Kohleman, druggist.
Metuchen	Dr. W. V. McKenzie.
Metuchen	Board of Health.
Milford	Dr. C. H. Darmon, druggist.
Millburn	Millburn Pharmacy.
Millville	Geo. W. Weber, druggist.
Millville	D. Evans Smith, druggist.

Montclair	Benham & Johnson, druggists.
Montclair	Loeser's Pharmacy.
Moorestown	Board of Health, Dr. Stroud, Inspector.
Morristown	Henry M. Smith, druggist.
Mount Holly	E. B. Jones, druggist.
Mullica Hill	Dr. S. F. Ashcroft.
Newark	Dr. T. W. Corwin.
New Brunswick	J. H. Van Deurzen, druggist.
New Brunswick	Wm. Rust & Sons, druggists.
Newton	I. L. Hallek, Inspector.
North Plainfield	Board of Health, Rev. W. E. Honeyman.
Nutley	Henry T. Lefferts, druggist.
Ogdensburg	Dr. L. C. Burd.
Orange	Orange Memorial Hospital.
Orange	A. Mosler, druggist.
Orange	S. V. Begle, druggist.
Oxford	James A. Allen, druggist.
Palmyra	Dr. L. L. Sharp.
Park Ridge	Dr. H. C. Neer.
Parsippany	Dr. E. S. Cooper.
Passaic	Otto Lane, druggist.
Passaic	Van Riper & Co., druggists.
Paterson	Board of Health.
Paterson	Gurdon E. Pellett, druggist.
Perth Amboy	Board of Health.
Pitman	Dr. L. N. Slaughter.
Plainfield	Board of Health.
Pleasantville	Dr. J. H. Worth, Jr., druggist.
Pompton Lakes	Dr. J. C. Morgan.
Port Norris	Dr. S. F. Day.
Port Oram	Dr. H. W. Rice.
Princeton	Marsh & Burke, druggists.
Princeton	W. L. Brimer, druggist.
Rahway	George F. Brown, druggist.
Ramseys	Dr. C. P. DeYoe, druggist.
Raritan	Board of Health.
Red Bank	Chas. A. Minton & Co., druggists.
Ridgefield Park	Dr. Henry C. Elsing.
Ridgewood	H. A. Tier, druggist.
Ridgewood	Dr. W. L. Vroom.
Riverside	Warren C. Pine, druggist.
Riverton	Dr. Alex. Marcy, Jr.
Rockaway	Dr. F. W. Flagge.
Rockaway	Dr. Geo. H. Foster.
Roselle	J. W. Rewalt, druggist.
Rutherford	Board of Health.
Salem	John E. Davis, druggist.
Salem	Loeser's drug store.

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Sea Bright	Sea Bright Pharmacy.
Somerville	Jas. N. Case, druggist.
South Amboy.....	Dr. Anna Manning.
South Bound Brook.....	Dr J. T. Robinson.
South Orange	Jas. W. Gladhill, druggist.
South River.....	Dr F. W. Bissett.
Springfield....	Dr. J. A. Stiles
Stanhope.....	Nelden's Pharmacy.
Succasunna	Dr. N. H. Adsit.
Summit.	W. H. Rogers, druggist.
Swedesboro.....	Guest & Guest, druggists.
Toms River.....	Dr. R. R. Jones
Town of Union (Weehawken).....	Aug. Frank, druggist.
Trenton	Board of Health.
Trenton	Mercer Hospital.
Trenton.....	D. Wiley Baker, druggist.
Trenton.....	Albert G. Holcombe, druggist.
Trenton.....	G. D. Laird, druggist.
Trenton.	Lewis W. Long, druggist.
Trenton.....	James L. Mathis, druggist.
Trenton.....	John J. Strasser, druggist.
Tuckahoe.....	Dr. J. S. Douglas.
Verona	Verona Pharmacy.
Vincentown.....	Frank S. Hilliard, druggist.
Vineland.....	Alfred Pierson druggist.
Wanaque.....	Dr. W. N. Shippee.
Washington	Chas. M. Williams.
Westfield	Bayard Pharmacy.
West Hoboken.....	Frank H. Eckert, druggist.
Westwood.	Dr. Theodore E. Townsend.
Whippany	Dr. Harry S. Wheeler.
Williamstown	Dr. J. G. Edwards.
Woodbridge	Dr. B. W. Hoagland.
Woodbury	J. W. Merritt, druggist.
Woodstown	Harry Guest, druggist.

Respectfully submitted,

HARMON O. BALDWIN.

Report of Health Officer of the Port of Perth Amboy.

PORT OF PERTH AMBOY, N. J.,
November 13th, 1901. }

To the State Board of Health:

GENTLEMEN—I have the honor of presenting to you herewith the second annual report of this office, for the year ending October 1st, 1901, as follows:

In accordance with the provisions of the Quarantine law, the following number of vessels were inspected at this port:

Foreign vessels, 21; domestic vessels, 81; total, 102.

Of the above, 13 were steam and 89 were sailing vessels.

One thousand three hundred and thirty-two inspections of persons were made during the year—on steam vessels, 442 (officers and crew); on sailing vessels, 893, including officers and crew and three passengers.

The following table shows the number of vessels entering this port, and also the port of departure of each:

		PORTS OF DEPARTURE.																				
PERIOD OF ARRIVAL.		Brunswick, Ga.	Port Tampa, Fla.	Jacksonville, Fla.	Fernandina, Fla.	Savannah, Ga.	Wilmington, N. C.	Mobile, Ala.	Pascagoula, Miss.	Georgetown, S. C.	Hillsborough, Fla.	Charleston, S. C.	Trinidad, W. I. (Br.)	Tampico, Mex.	Cayenne (Fr.)	Conetable Is. (Fr.)	St. Domingo, W. I.	St. Thomas (Dan.)	Cheverie, N. S.	Fredericton, N. B.	Monckton, N. B.	
1900.																						
October.....		2				2							1								5	
November	7	1	2	4	1								1	2			1		1		20	
1901.																						
March.....		1	3	4	1	3				1			1	1		1					16	
April.....		2	1	2	2	3		1	1												12	
May.....		1	3			4							1		1			1			11	
June.....		5	1	1	1	1						1	2								12	
July.....		1	1	1	2								1	1		1			2		10	
August.....		1				2	1				1		1							1	7	
September.....		2	2		3	1										1					9	
Totals.....		20	14	10	13	17	1	1	1	1	1	1	8	3	1	3	1	1	3	1	1	102

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Fees collected for the year, \$223.75.

It gives me great pleasure to state that no cases of contagious or infectious diseases have been found on board of any vessel entering this port. Five cases of sickness were found during the year. These were all confined to one vessel, and developed some days after landing. The persons affected were on board the steamer Vittoria (Br.), arriving here November 18th, 1900, from Tampico, Mex. The diagnosis was remittent fever. After a few days of treatment they were discharged.

The Quarantine law, although comparatively new, has been quite generally observed. We still feel the necessity of having some suitable vessel for reaching the anchorage grounds, and it is hoped that this will be provided for in the near future. One special permit (to land rags, hides, straw and bedding) was granted during the year. This was to Captain Neil McCalla, of the British schooner Mola, which was stranded off the New Jersey coast near Chadwick, April 20th, 1901. She was loaded with hides from Buenos Ayres, S. A.

Total number of permits issued during the year was 103.

Respectfully submitted,

E. A. HULTS, M.D.,
Health Officer, Port of Perth Amboy, N. J.

Report of Outbreaks of Communicable Diseases.

BY A. C. HUNT, M.D., STATE SANITARY INSPECTOR.

The legislative enactment of 1887, creating local boards of health and the State Board of Health, conferred upon the State Board of Health similar powers to those granted to local boards of health, and, in addition thereto, control of infected persons and baggage in transportation upon railroads. The law also placed the State Board of Health in an advisory relation to local boards, and made it the duty of the State Board of Health to investigate the causes of epidemics. The organization of boards of health in the larger cities has been perfected to such a degree that the State Board of Health is seldom called upon to give advice in regard to outbreaks of communicable diseases in those districts. In townships and small municipalities, however, a different state of affairs exists. Local boards of health in townships are composed of the township committee, the assessor and a physician. The persons composing such boards are, generally, in rural districts, farmers and business men whose attention has never been called to sanitary matters, and therefore they are often unfitted to deal with problems of this nature. Our experience has shown, however, that local boards of health in townships are very willing to receive advice and to act upon it, and the results of sanitary administration in townships, in the care of communicable diseases, have been fairly satisfactory. Under the law passed by the State Legislature in 1895, local boards of health are compelled to make weekly returns of all cases of communicable diseases occurring in the various sanitary districts. This law is not observed as rigidly as desired, but there has been a slight improvement from year to year, and we trust that the time is not far distant when full reports will be received from every locality each week. In cases of small-pox, however, the local boards of health usually send a telegraphic communication to the State

Board of Health requesting the presence of an inspector and asking for advice. These appeals are attended to at once, and it is customary to call a meeting of the local board of health and in detail to consider the methods to be used in preventing the spread of the disease. The diagnosis of the first case of small-pox which occurs in any given district is a very important matter, and in rural districts of the State there is often no medical man who has been fitted by experience to definitely determine whether the case is one of small-pox or not. In such cases we have been able to assist local boards of health to a marked degree by sending to their aid physicians accustomed to making the diagnosis of small-pox. As showing the necessity of giving this aid, a case can be cited where a hotel was closed on account of the supposed existence of a case of small-pox, and a great deal of alarm had been created by the report. An examination of the case by a physician detailed by the State Board of Health showed that it was not a case of small-pox, and quarantine was immediately raised. In another instance, a case of supposed small-pox occurred in an individual, but examination made by an expert showed that the disease was acne, and not small-pox. It is evident that if we had not been able to assist the local boards of health in these instances unnecessary expense to the locality and privation to the individual would have resulted.

As to vaccination, the local boards in every instance have been urged to take immediate steps to see that not only persons who had been exposed to the disease should be vaccinated, but that systematic vaccination of all of the inhabitants of the city, borough or township should be carried on. It has been our experience that the tendency is to merely vaccinate those persons who have been exposed, and to stop at this point. It requires a great deal of insistence on the part of the State Board of Health to bring local boards of health to a clear perception of the necessities of requiring vaccination of the whole population. Not only is vaccination insisted upon, but care is used to impress the necessity of aseptic methods of performing the operation, as the evidence is increasing day by day that unfavorable results occur more from lack of care in the operative procedure than from the use of impure vaccine.

As regards isolation of patients, the position has been taken by the State Board of Health in every instance that the only proper method of dealing with cases of small-pox is to remove the patient immedi-

ately to an isolation hospital. Experience has shown that isolation in private dwellings is, as a rule, unreliable. An instance occurred several years ago in a township in this State where, although guards were placed before the infected houses day and night, several of the quarantined individuals made their escape during the day and visited a crowded picnic ground and remained there an entire afternoon. This case shows the unreliability of the average quarantine of private dwellings. A movement has been started in Essex county having as its object the securing of an isolation hospital for the use of the townships outside of the larger cities. At a recent meeting of the State Board of Health a resolution was passed urging the necessity of providing isolation hospitals in each county of the State, and we trust that the time is not far distant when in every county of the State ample provision will be made for the isolation and care of cases of small-pox.

As regards disinfection, it is the custom of the State Board of Health to not only describe the methods of disinfection, but in a number of townships where cases of communicable diseases have occurred we have been able to send to the aid of local boards of health a person thoroughly competent to disinfect infected buildings. It is safe to say that there are not five persons in the large number of townships and boroughs of the State who are fully competent to disinfect premises after small-pox.

It will be noted, from what has been said, that the relation of the State Board of Health to local boards of health is chiefly advisory, and yet good advice, given at a proper time and cordially received and acted upon, is often more effective than the exhibition of power. The effort has been throughout to increase the efficiency of local boards of health, and it is evident from the experience of the past year that local boards of health are more and more availing themselves of the experience of the State Board of Health in regard to the care of cases of communicable diseases.

The year ending December 31st, 1901, has been marked by an outbreak of small-pox in the State of New Jersey, and 1,139 cases have been reported in that period. At the termination of the year 1900 there were a number of localities in the State in which the disease existed, but from January 1st, 1901, to the end of February the indications were that the disease was under control. At this time, how-

ever, cases were reported in Newark, and the source of infection was traced to tramps coming from New York. The existence of the disease in New York City is probably the origin of the outbreak in the city of Newark. In the body of this report a statement is made as to cases which have occurred in Newark during the year. From Newark the disease extended to a number of adjacent localities. In the southern part of the State, more especially in Gloucester county, over forty cases were reported, and to this outbreak a number of cases occurring in surrounding districts were traced. Following is the history of the cases of communicable diseases occurring in various localities of the State in which the State Board of Health was called upon to give advice and assistance:

SMALL-POX.

Acquackanonk Township.—One case of small-pox was reported in this township during the year ending December 31st, 1901. The disease is supposed to have been contracted in a tenement house in New York City. But one house was infected. The house in which the patient lived was immediately quarantined, and the quarantine was maintained for fifty days. The house was then fumigated and the patient liberated.

Asbury Park.—On November 7th, 1901, a case of small-pox was reported on the premises No. 506 Grand avenue. Inquiry showed the following facts: The patient was a colored coachman who came to Asbury Park from Newark, New Jersey, on October 23d, 1901. On November 3d he complained to his employer of feeling ill. On November 4th he ate his breakfast in a restaurant on the corner of Main street and Monroe avenue and subsequently consulted a physician, after which he returned to his room in the stable building on the premises above referred to. A porter, employed on the adjoining premises, waited upon the patient from November 4th to November 7th, when the case was reported to the board of health. The porter was sought out, cleaned up, vaccinated and kept under observation for fourteen days. The family in which the coachman was employed, acting under the advice of the health inspector, were also vaccinated. A temporary hospital building, which was authorized to be constructed at a special meeting of the board on November 7th, was erected, a nurse employed on November 8th, and the patient and nurse were taken to the hospital on November 9th. The temporary building erected for the care of this case was 24 ft. by 24 ft., with roof and sides covered with three-ply tarred paper. The hospital was opened on November 9th and closed on December 26th. The cost to the city for the care of this case amounted to \$310.76. The cost of erecting the building was \$212.56. No new cases appeared.

Atlantic City.—During the year ending December 31st, 1901, nine cases of small-pox occurred in Atlantic City. May 8th a case was reported at 132 North New York avenue, in a colored lodging house. The disease was contracted in Acamag county, Virginia. Four other persons living in the house contracted the disease. November 8th a case was reported, and the origin of the disease was traced to exposure in Philadelphia. Two other cases were reported, and the disease was

traced to infection in Philadelphia. The last case reported during the year was on December 20th. All of the patients suffering from the disease were removed to the hospital, and the houses were quarantined and premises were disinfected.

Bayonne.—Following is the list of cases of small-pox occurring in Bayonne during the year ending December 31st, 1901: June, 1; November, 4; December, 33—Total, 38.

Boonton.—Following is a report by Dr. A. E. Carpenter of a case of small-pox which occurred in Boonton: There has been but one case demonstrated. The origin has not been satisfactorily ascertained. Diagnosis was not promptly made, owing to the fact that the patient had had small-pox before. Eruption came out irregularly, first appearing on body, and then in two days appearing on neck, face and extremities. A few persons, consequently, were exposed to contagion before character of the disease was determined. The first measure employed to prevent spread of the disease was to isolate patient with a professional nurse, vaccinate all who had been exposed, and then everybody in the immediate neighborhood of the house. The house was a good one and located in the best part of town. Then we instituted general vaccination and opened a headquarters where those unable to go to the expense might have it done free of cost. Case terminated by death, July 16th, and was buried five hours after death. House was thoroughly fumigated with formaldehyde by a skilled fumigator from Paterson. The room where the patient died was kept sealed for thirty-six hours, when bedding, all clothing and carpet, and, in fact, everything of a fabric material were taken out of town and cremated. After this was done the house was again fumigated. The house was unoccupied for fourteen days after burial of the patient. Those who came in contact at burial and the cremation of the clothing were vaccinated, properly cared for afterward and inspected daily. The cost to the public for vaccination, fumigation and other incidentals will probably be less than one hundred dollars.

Buena Vista Township.—Three cases of small-pox were reported in Buena Vista township during the year ending December 31st, 1901. The first case originated in New York City. In the two other cases which occurred there had been exposure to the original case. The houses in which the disease appeared were promptly quarantined and no other cases were reported.

Burlington Township, Burlington County.—A case of small-pox was reported in December, 1901, in this township, on Rancocas road, near the city of Burlington.

Camden.—No cases of small-pox were reported in Camden until October, 1901. In this month 13 cases occurred, in November 8 cases were reported, and in December 63 cases, making the total number of cases for the year 86. Six deaths resulted from the disease.

Carlstadt.—During the year ending December 31st, 1901, two cases of small-pox occurred in the borough of Carlstadt. One of the cases was imported from New York City and the other from Hoboken. One death resulted from the disease. Quarantine was established in each instance, and after the recovery of the patients the premises were thoroughly disinfected. No further cases were reported.

Chatham Township.—At the request of the members of the Chatham township board of health a conference was had October 3d with the president of the board of health and Dr. Scarborough, the physician acting for the board. Within a few days two cases of small-pox had been discovered in the township. One of

these cases was in the person of a young woman, the daughter of gardener living in the township. Her exposure is traced to the fact that she visited in Passaic township, Morris county, a family where the disease already existed. In the house where this person was quarantined there were seven other persons. One other case had developed in the person of a young man, and the origin of the disease is traced to the same source. During the conference it was suggested to the board of health of Chatham township that a temporary hospital should immediately be constructed, to which the sick persons should be removed, and that all the persons living in the vicinity should be vaccinated. The board of health finally decided to maintain quarantine of the houses rather than construct a hospital. No other cases occurred.

Clinton Township, Essex County.—A case of small-pox was reported at Park View, Clinton township. The house in which the patient lived was quarantined and no other cases occurred.

Collingswood Borough.—A case of small-pox was reported in Collingswood on Monday, December 9th. Immediate steps were taken by the local board of health to isolate the patient. An empty house was rented and a hospital at once established. The case was traced to exposure to the disease in Camden. Since December 9th two other cases have occurred. The origin of these cases was probably due to exposure in Philadelphia.

Cranford.—Following is the history of several cases of small-pox which occurred in Cranford: On Wednesday, March 6th, a person named Edward O'Brien was found in the Central Hotel, located in the thickly-settled portion of the borough of Cranford, suffering from small-pox. A temporary hospital was at once erected, and on Friday, March 8th he was removed to it. The hotel was disinfected Saturday, March 9th, by a skilled person, and was re-opened for the transaction of business on Wednesday, March 13th. Under the direction of the local board of health, Dr. McConnell examined daily the persons living in the hotel who had been exposed to the disease, and on Thursday, March 21st, found that Hugh MacGelvey, a bartender, had an eruption. He was isolated, and on Saturday, March 23d, was removed to the contagious disease hospital. The hotel was again disinfected Sunday, March 24th. At this time there were eight inmates, and two of them had had the small-pox. Those who had been exposed had been twice vaccinated. The hotel was again re-opened for business on March 27th. No other cases developed.

Downe Township, Cumberland County.—A case of small-pox was reported in the latter part of November as existing at Dividing Creek, in Downe township. A young man had come from a school in Norristown, Pa., and had probably been exposed to infection at that place. Although there were a number of exposures to this case no other persons contracted the disease.

Dunellen Borough.—In the latter part of May, Dr. Nelson, of New Market, was called to attend a child in the family of a German living on the westerly border of Dunellen and on the line of the trolley road. The typical symptoms of small-pox were noticed, and following the first case three other children developed the disease. The local board of health at once quarantined the house, and upon removal of the patients the premises were thoroughly disinfected. Since that time no other cases have occurred.

East Newark.—Cases of small-pox were reported as follows: April, 13; August, 2; October, 1. Total, 16.

Eatontown Township.—One case of small-pox occurred in this township during the year ending December 31st, 1901. The case was reported on November 18th,

and the patient was immediately removed to the isolation hospital. The patient was a colored man who was employed as a coachman, and he occupied rooms over a stable. His wife was vaccinated on the day that the case was reported. The vaccination was successful, but twelve days from the date of her exposure to small-pox she developed a mild case of varoloid, and it was evident that the disease had been modified by vaccination. The source of contagion was not traced. A large number of persons were exposed to the primary case, but owing to the almost universal practice of vaccination in this locality no other cases developed.

Elizabeth.—During the year ending December 31st, 1901, ten cases of small-pox occurred in Elizabeth. The cases were located in various portions of the city, and each case has been traced to infection outside of the city. In April one case was reported in a tenement-house on Spring street, in which six families resided. The patient was removed to the hospital, and no other cases occurred. September 7th a case was reported in the person of a man employed in a mattress factory. The patient was removed to the hospital, and no other cases occurred in the house. November 16th a case was reported at No. 9 Spring street. There were four families living in the house. No other cases developed at this point. October 22d a case was reported at 227 Magnolia avenue, and on November 24th a case occurred at 234 Magnolia avenue. November 28th a case was reported at 1087 Elizabeth avenue. November 29th a case was reported at 22 West Sortt Place. December 25th a case of small-pox occurred in the Elizabeth General Hospital. The patient was taken to the hospital, suffering with typhoid fever, and developed small-pox while under treatment. December 31st two cases were reported, one being at 126 Price street and one at No. 9 Broad street. The procedure of the local board of health in cases of small-pox is as follows: As soon as the diagnosis is made the premises where the patient resides are immediately quarantined, and this quarantine is maintained for two weeks. The patient is at once removed to the isolation hospital, and all persons residing within 250 feet of the infected house are vaccinated. The houses are then disinfected with formaldehyde, and all portions of the house used by the patient are washed down with bichloride of mercury. The isolation hospital which is used by the city is located on an upland, near the Elizabeth and Newark meadows, at a distance of 650 feet from the city almshouse. There are two buildings. The hospital proper is 28 by 100 feet and the detention hospital 18 by 20 feet. In the hospital, at each end, is a ward 27 by 33 feet, and off the corridor connecting these are four rooms for the nurses or patients. In addition to this there is a doctor's room, kitchen and laundry. At the end of each ward there is a bath-room. Patients are not received from any adjoining sanitary districts.

Fairview.—Three cases of small-pox were reported in Fairview during the year ending December 31st, 1901. The disease appeared in a young child, and ten days previous to the attack some theatrical people had stayed over night with the parents of the child, and it is possible that the infection was brought by them. The patient was removed, together with the father and mother, to the isolation hospital at Snake Hill. The father of the child was detained for two weeks and then released. The mother contracted the disease while caring for the child at the hospital. A case of variola was discovered in a young man who was sent by his physician to the hospital, where it was ascertained that he was suffering from the disease, and he was also removed to Snake Hill. Extensive vaccination was practiced in the borough, and no other cases were reported.

Hopewell Township, Cumberland County.—On May 23d, 1901, a case of small-pox occurred at Roadstown, Hopewell township. The patient was at once quarantined by the local board of health and kept under guard until July 18th, when the quarantine was raised after the premises had been thoroughly disinfected. No other cases were reported.

Irvington.—Eleven cases of small-pox occurred in Irvington during the year ending December 31st, 1901, and two deaths resulted. Six houses were infected. The houses in which the disease appeared were at once quarantined, and the local board of health assumed active supervision of the outbreak. An effort was made when the first case occurred to secure a suitable place for the location of a hospital, but such strong objection was raised that the local board of health could not find a place that was available, and therefore of necessity were compelled to depend upon domestic quarantine.

Jersey City.—Following is a list of cases of small-pox reported in Jersey City during the year ending December 31st, 1901: March, 8 cases; April, 18; May, 20; June, 5; July, 3; August, 1; November, 19; December, 56, making a total of 130 cases.

Kearny.—One case of small-pox from this locality was reported in October and two cases in November. Total, three cases.

Keyport.—Following is a report by D. E. Roberts, M.D., on the small-pox case which occurred in Keyport: Miss H. returned from New York about February 20th last, feeling ill. She immediately went to her room, and not feeling much improvement, remained in her bed for the day. Dr. Johnson was consulted, and the next day a rash was discovered which proved a severe case of small-pox. She had not been successfully vaccinated. From the history we judged the disease came from New York. No one excepting father, mother and grandmother were exposed. They were vaccinated immediately and no new cases developed. The house was strictly quarantined, and the expense was, for hiring messenger, \$1.50 per day, and subsequent disinfection of the premises. The case recovered.

Manasquan.—Nine cases of small-pox occurred in Manasquan during the year ending December 31st, 1901. The first case occurred June 8th. The person having the disease died, and it was not supposed at that time that the cause of death was small-pox. A public funeral was held. A daughter of the deceased person was attacked with what was supposed to be measles, but there is no doubt but that the case was one of small-pox. June 24th another case was reported in the person of a woman who had nursed the first two cases. July 14th three cases were reported as occurring in a family related to the original cases. July 23d three cases were reported. The local board of health erected a hospital and also secured tents for the care of the persons suffering from the disease. General vaccination was practiced. The patients were finally discharged August 15. The total cost for the care of the patients was \$2,100.

Matawan.—Five cases of small-pox occurred in one house in the borough of Matawan during the year ending December 31st, 1901. A colored woman came from 97 Tichnor street, Newark, December 12th. According to a statement made by her there were two other cases in the house in which she lived in Newark, and these cases were conveyed to the isolation hospital. She made her escape from the house and came to Matawan. Upon leaving the train at Matawan she entered the stage and was driven to her home. The Newark authorities notified the board of health in Matawan of the escape of the patient, and the house to which she had come

was immediately quarantined. Four persons in the family contracted the disease. The patients all recovered and were liberated February 25th, 1902. A large proportion of the persons living in the borough were vaccinated, and as a result no other cases occurred.

Merchantville.—One case of small-pox occurred in Merchantville during the year ending December 31st, 1901. As soon as a report of the case was received from the attending physician the board of health held a meeting, and a strict quarantine was placed upon the premises. Guards were employed to see that the quarantine was effective. The case was supposed to have originated from exposure to the disease in Philadelphia. No other persons living in the family contracted the disease. Within four weeks the patient had recovered and was discharged from quarantine and the premises were thoroughly disinfected.

Middletown Township.—A case of small-pox was reported in this township in January, 1901. The origin of the disease was not ascertained. The patient was at once removed to the Long Branch isolation hospital. The house from which the patient was taken was thoroughly fumigated, and no other cases were reported.

Millburn Township.—Following is a history of the cases of small-pox which occurred in Millburn township during the year ending December 31st, 1901: On November 9th, 1901, there was reported to the local board of health a case of small-pox in the person of an Italian living with a family of Italians in a tenement-house. There were seven other families in the house. A meeting of the local board was called within a few hours. The patient was quarantined in his apartment with an attendant. The house was completely quarantined. All persons exposed or living in that vicinity were vaccinated and quarantined. Measures were taken to construct a building to which the patient might be removed, but his illness was of such a severe nature that the removal was not effected. All the persons who had been exposed were revaccinated on the fourth day. On November 18th a case was reported in another part of the township, in the person of a man living by himself. He was immediately removed to the isolation hospital and placed in charge of a trained nurse. The house was fumigated, and all persons who had been exposed were vaccinated and quarantined for fourteen days. The local board of health insisted that all school children who had not been vaccinated within three years should be vaccinated. Both patients recovered. The origin of the disease was traced in the first instance to exposure at Hoboken and in the second to exposure in Newark.

Monroe Township, Gloucester County.—Four cases of small-pox were reported in Williamstown, Monroe township, and the history of the cases is as follows: On May 11th Mr. and Mrs. L., residing at Ravenswood, Long Island, were taken ill, and a physician called to attend them said that they were suffering from malarial fever. These persons came to Williamstown on May 13th, and Dr. Edwards was at once summoned to attend them. He found an eruption in each case, and the diagnosis of small-pox was made. The other persons living in the house were at once vaccinated and the house was quarantined. The patients were isolated in a separate portion of the house. May 28th two other persons in the house developed the disease. All of the patients recovered. The house was fumigated. An interesting point in the history of the origin of these cases is that in all probability the disease was contracted by exposure to a walking case of small-pox which had occurred in Ravenswood, Long Island, where the family had lived.

Montclair.—During the year ending December 31st, 1901, six cases of small-pox were reported to the board of health in Montclair. Where possible the patients

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were at once removed to the isolation hospital, and large numbers of persons living in the town were vaccinated. Over 1,000 gratuitous vaccinations were performed during the year.

Morristown.—One case of small-pox was reported in Morristown during the year ending December 31st, 1901. This case occurred on May 11th. The patient was a tramp who had come from Dover. He was at once removed to the hospital, but was released after being quarantined a short time, as he was recovering from the disease when he came to the hospital.

Mt. Laurel Township, Burlington County.—Early in March a report was made to the local board of health that there were cases of small-pox in the township. The first report was made on the 8th of March, and the statement was made by the physician that there were four cases. Within five days eight cases were reported to the local board of health, and these eight cases were in five different houses. There were three cases in one house, two cases in another house and one case each in three additional houses. All the patients were colored with one exception. The origin of the disease could not be traced, but Herbert Muse, the first case reported, had been in Philadelphia, and it is supposed that he contracted the infection there. All the other cases had been exposed by visiting one with another. Immediate quarantine was placed upon the houses, and the local board of health vaccinated all colored persons living in the township. A report was received from William P. Lippincott, secretary of the board of health, bearing date, of March 25th, 1901. He stated that no new cases had developed within the last five days. A hospital was erected and five of the patients were removed to it. The hospital cases were placed under the care of Dr. Thorn. In this same communication he states that nine-tenths of the white people living in the township have been vaccinated. Fifteen cases in all were reported.

Newark—Following is a list of the cases of small-pox and the deaths resulting therefrom which have occurred in Newark during the year ending January 1st, 1902: In January, 1901, no cases were reported, and in February and March but eight cases. The number of cases reported from March shows a steady increase, and in the month of December it will be noticed that one hundred and eleven cases were reported. The original cases in Newark were traced to exposure of persons to the disease in New York City. The death-rate, it will be noticed, is somewhat over 18 per cent, but the statement is made that the deaths which have occurred were mostly of young children, unvaccinated persons and alcoholics.

		Deaths.
February.....	3	.....
March.....	5	.....
April.....	32	3
May.....	17	2
June.....	7	3
July.....	18	4
August.....	21	6
September.....	35	11
October.....	35	7
November.....	103	18
December.....	111	16
Total.....	387	70

In isolation hospital at end of year, 136.

Newton.—One case of small-pox was reported in Newton during the year ending December 31st, 1901. Miss M., a milliner boarding at the house of Dr. B., Madison street, Newton, New Jersey, returned from Watertown, New York, the middle of January, 1901, where she had been visiting her brother, sick of typhoid fever in a hospital of that city. At the time of her visit there were a few cases of small-pox in the city of Watertown. Miss M. was not aware that she had been near any person sick of that disease. About the first of February a papular rash was noticed on the face of the patient. There were a few papules on the body and extremities, and the papules later became pustules. February 3d local physicians were called in to examine the case, but failing to satisfy themselves whether the case was small-pox or not, they advised isolation of the patient, and on the 5th, Dr. Worl, of Newark, pronounced the case one of modified small-pox. The seven persons living in the house were early vaccinated by Dr. B. The place was put under close quarantine by the local health board, a guard being left over it both day and night. At the end of thirty days the patient had fully recovered. The house was cleaned and disinfected by a man skilled in the work and the quarantine was raised. No other persons took the disease.

North Bergen Township.—One case of small-pox occurred in this township in the month of July, 1901.

Orange.—Following is the history of the cases of small-pox which occurred in Orange during the year ending December 31st, 1901: March 14th two cases were reported. The persons affected with the disease had visited Newark, and the supposition is that the disease was contracted in that city. March 24th a case was discovered at 56 Hickory street. The patient was quarantined with three Italian families, numbering nineteen persons, and two colored families, numbering nine persons. This case was traced to the cases occurring on March 14th. On November 14th, 1901, an unvaccinated child, seven months old, was found suffering with the typical disease of small-pox at 16 Hurlbut street. Twelve persons were living in the house. Within twenty-four hours of the discovery of this case five other persons in the family were attacked with the disease. Inquiry disclosed the fact that an adult in the family had been ill some three weeks before with a disease which was treated as pimphigus. From the fact that the case of small-pox occurred directly following this case, the inference is that the case was one of small-pox and not of pimphigus. The patients recovered, and December 24th, 25th and 26th the house was disinfected and quarantine was raised. Shortly after this a case was reported at 117 Berkely avenue, and investigation showed that this person had visited the family living on Hurlbut street, and there is no doubt that the disease was contracted at that place. Three more cases occurred in the same family, and there was one death. On December 7th a case was reported at 94 Mechanic street and another at 64 Carroll street. The patients in this instance had been employed as quarantine officers at 16 Hurlbut street. On December 7th a case was reported at 66 High street, and the theory of infection is that the disease was contracted from a pet cat which had come from an infected house. Another case was reported December 11th at 102 Center street, within one hundred and fifty feet of 16 Hurlbut street. The person who was attacked with the disease was employed as an errand boy in a grocery store, and had visited infected houses. December 10th a case was reported at 183 Cleveland street. The disease appeared in the person of a man who was a hack driver at the Orange railroad station. December 16th two cases were reported, one at 64 Carroll street and another at 24 Mead street. The origin of infection in

these cases was traced to direct exposure. A case was reported at 28 Center street on December 19th. The last case was reported late in December at 90 Cone street. The total number of cases which occurred in Orange during the year was twenty-three. In no instance where the disease occurred was there evidence of a recent successful vaccination.

Passaic City.—On November 5th, 1901, the first case of small-pox was reported in Passaic. The patient had come from 124 East 138th street, New York City. On November 15th and 16th two other cases occurred in the same family. The New York authorities made an inspection of the premises on East 138th street, but no cases of small-pox were discovered. December 7th a young man who came from Tuckahoe, New York, was found suffering from small-pox. December 14th another case was reported. December 17th a case was reported, and the origin of the disease was traced to exposure to the case which occurred on December 7th. The patient died December 25th. A second case was reported on December 17th, and the origin of this case was also traced to exposure to the case which occurred on December 7th. On December 24th a case was reported in the person of a child seven months old. The source of infection was not traced. Total, eight cases.

Passaic Township, Morris County.—During the investigation of the cases of small-pox in Chatham township, Morris county, it was learned that there had been some cases in Green Village, in Passaic township, and an appointment for a conference was made with the president of the board and the physician on October 4th, 1901. The following facts were ascertained: Some three weeks prior to October 4th, 1901, the physician of the board was called upon to attend a young lady who had been sent to Green Village by a physician in an adjacent sanitary district. She had an eruption, and it was supposed that she was suffering from chicken-pox. The patient was the daughter of Mr. Totten, and in Mr. Totten's family there were nine people, all told. The children were taken sick soon after, and all developed the same sort of eruption, and it was not until the father and son, who had not been vaccinated, were attacked by the disease that its true nature was recognized. There were eight cases in this family. In addition to this a cousin of Mr. Totten, with an infant, visited the infected house, and as a result two cases were reported within a quarter of a mile of Mr. Totten's. In another family that had been exposed to the Totten family, two other cases developed, making a total of thirteen cases. The houses were quarantined and, as far as known, persons that had been exposed were vaccinated. An effort was made to impress upon the physician of the board and Mr. Haley, the president of the local board, the necessity of immediate action in the construction of a temporary hospital, and that cases should be removed to it at once and the infected houses from which they were taken immediately disinfected and renovated.

Paterson.—Following is a list of the cases of small-pox reported in Paterson during the year ending January 1st, 1902. It will be noticed that Paterson, although so closely connected with Newark, Jersey City and New York, by railroads and trolley systems, has escaped any serious epidemic of the disease. This may, in part, be due to the fact that hospital arrangements are satisfactory and that great care is exercised when a case occurs to ascertain the names of all persons who have been exposed and to see that they are at once vaccinated. January, 4; February, 6; March, 1; April, 13; May, 11; June, 1; July, 1; December, 1—Total, 38.

Pennington.—One case of small-pox occurred in this borough during the year ending December 31st, 1901. A young man who was employed in New York came

to Pennington, and becoming ill was examined by a physician, who pronounced the case to be one of small-pox. The house in which he boarded was at once quarantined, the inmates vaccinated and precautions taken to see that no one came in contact with the infected premises. Quarantine was maintained until the removal of the patient, and after his removal the house was thoroughly disinfected. No other cases occurred.

Perth Amboy.—Five cases of small-pox occurred in Perth Amboy during the year ending December 31st, 1901. The first case was traced to infection contracted while working in New York City. The second case reported was in the person of a sister of the first case. The third case was undoubtedly contracted while the patient was visiting in Hoboken, although no history of direct exposure was obtained. The fourth case was in the person of a man working in a silk mill on Staten Island, and, although every effort was made to ascertain the source of infection, no direct evidence was secured. The patient died at the end of two weeks. The fifth case was a brother of case number four, and contracted the disease directly from him. Three houses in all were infected. In each case quarantine was established, and watchmen were placed over the premises to see that the quarantine was strictly maintained. All occupants of the houses were immediately vaccinated, and in no instance did the disease spread beyond the house in which it originally occurred. The total cost to the city for the care of these cases was \$650.

Princeton.—One case of small-pox occurred in Princeton during the year ending December 31st, 1901. The disease appeared in the person of a colored man. All persons that were exposed to the disease were immediately vaccinated and the house in which the patient resided was quarantined. Steps were at once taken looking toward the erection of a hospital, and as soon as the hospital was completed the patient was removed to it. After the period of infection had passed the premises where the original case appeared were thoroughly disinfected and the persons under quarantine were released.

Rahway.—The first case of small-pox occurring in this city in 1901 was reported August 12th, and the origin of the disease was traced to Newark. The house in which the patient lived was quarantined, and upon recovery of the patient the premises were thoroughly disinfected. November 25th a case was reported, and the origin of this case was also traced to Newark. All the usual precautions were taken to limit the spread of the disease. December 12th a case was reported, and this was traced to the cases which had been reported on November 25th. December 25th four cases were reported, and December 26th one case was reported. In the later cases the origin of three of them was traced to infection at Newark, and in two of the cases the origin was untraced. During the outbreak, cases occurred in seven different houses. The local board of health employed a physician to attend the cases and established prompt quarantine of infected premises.

Red Bank.—Three cases of small-pox occurred in Red Bank during the year ending December 31st, 1901. The first case occurred July 12th. The patient had been on a visit to Jersey City, and in all probability the disease was contracted there. The patient was at once removed to the isolation hospital. Fourteen days after her return from the city her husband was attacked with the disease and was also removed to the hospital. December 18th a case was reported, and the history showed that the patient had been visiting friends in one of the cities where small-pox existed. The patient was removed to the hospital and no other cases were reported.

Riverton.—Following is a report of the cases of small-pox which occurred in Riverton during the year ending December 31st, 1901: Mr. V. K., aged sixty-eight years, had been vaccinated forty years prior to the time of his illness. On December 13th, 1901, he complained of headache, backache, and general muscular soreness, and a temperature of 103 was noticed. It was supposed that he was suffering from cold, and he was much improved on December 14th and 15th. On December 16th an eruption appeared, and a diagnosis of small-pox was made. In three weeks' time all signs of the eruption had disappeared and the patient was free from infection. A second case was reported in a woman who had come from Philadelphia, where she had been nursing her brother, who had been sent to the hospital for treatment for hemorrhagic small-pox. She had been vaccinated, but as the vaccination had not taken, another attempt was made to secure successful vaccination. She came from Philadelphia to Riverton, and in fourteen days from the time of her exposure she contracted the disease. The disease was very mild in type, and in four weeks from the commencement of her illness the patient was in such a condition that it was possible to disinfect the house in which she resided.

Roselle Park.—One case of small-pox was reported in Roselle Park during the year ending December 31st, 1901. The patient was first seen December 18th. He was a carpenter by trade and contracted the disease while working on the isolation hospital in Newark. He had not been vaccinated before he engaged in this work. The case occurred in a house which was located well away from other dwellings. There were six inmates residing in the house, and they were all vaccinated. None of them contracted the disease. The quarantine was maintained for five weeks, and after the recovery of the patient the premises were thoroughly disinfected.

Rutherford.—Two cases of small-pox occurred in Rutherford during the year ending December 31st, 1901. The origin of the case was undetermined. The cases were in nowise connected with each other, and the disease occurred in houses located at least a mile apart. The patients were immediately removed to the Hudson county isolation hospital at Snake Hill. The houses were fumigated with formaldehyde and washed with a bichloride solution. All bedding, carpets, &c., were destroyed. Quarantine was maintained upon the houses for two weeks. No other cases were reported.

Sandyston Township.—One case of small-pox occurred in Sandyston township during the year ending December 31st, 1901. The origin of the disease is supposed to have been from exposure to a case which existed in Newton at about this time. The patient was at once removed to the hospital at the county almshouse, and no other cases were reported.

Sayreville.—A report was received, by telephone, from Dr. Selover, of South River, stating that certain persons in Sayreville, under her professional care, were affected with an eruptive disease of a suspicious nature. A communication was forwarded to the local board of health advising that a diagnosis should at once be made, and the local board employed Dr. N. Williamson, of New Brunswick, to see the patient. Dr. Williamson reported that the case was undoubtedly small-pox. Following is a history of the outbreak: On November 15th, 1901, a man named Frederick Decker, who had come from Newark in a brick-scow, was attacked with what was thought to be chicken-pox. He was permitted, as soon as well enough, to go about the town, and went into the stores and public places until Thanksgiving Day, when Dr. Williamson examined him and made a diagnosis of small-pox. All of the cases of small-pox which occurred in Sayreville during the outbreak can be

traced directly or indirectly to exposure to Frederick Decker. In fact, a large number of the cases appeared among his relatives. The local board of health was requested to at once erect an isolation hospital. The action in regard to this matter was somewhat tardy, and it was not until December 15th that the hospital was made available. Prior to this time quarantine had been established, and the quarantine officers went from place to place, endeavoring to keep the persons from leaving infected dwellings. As rapidly as possible, the persons affected with the disease were removed to the hospital and the infected houses were fumigated. Forty-five cases in all were reported.

Secaucus.—One case of small-pox occurred in December, 1901.

Shrewsbury Township.—The first case which occurred in this township during the year ending December 31st, 1901, was in the person of a man who had escaped from New York City while under surveillance of the health board. He had taken a steamer at the foot of Franklin street, New York, in company with his wife and three children, and, landing at Oceanic, went to an unoccupied house within a short distance of several cottages. As soon as the case was reported the house was placed under quarantine and the patient immediately removed to the isolation hospital. The second case appeared in a person who had come from Philadelphia to Red Bank. This case was likewise at once removed to the hospital. Three cases were reported in the Brown family. Mrs. Brown was a sister of case number two, and undoubtedly contracted the disease from him. Five cases were reported in the Berry family, and these were also taken to the hospital. The total number of cases reported was ten, and but one death occurred. The total cost for the care of the patients amounted to \$2,700.

South Amboy.—Five cases of small-pox occurred in South Amboy during the year ending December 31st, 1901. The first case was in the person of a baggage-master working on the Central railroad, and the origin of the disease was not traced. Three of his children contracted the disease from him. Another case was reported in the person of an express driver, and the origin of the disease was not traced. There was no connection whatever between this case and the original case. The patient suffered from a severe attack of the disease and died. The two houses in which the disease occurred were strictly quarantined, and the disease did not extend to any other dwellings. After the recovery of the patients the premises were disinfected.

South Brunswick Township.—Six cases of small-pox occurred in South Brunswick township during the year ending December 31st, 1901. The first case came from Newark, and the disease was undoubtedly contracted in that city. Two other cases occurred in the same family. The persons having the disease lived near Plainsboro. The fourth case was in the person of a young man who came from Washington, D. C. He contracted the disease from his wife. He was taken sick in Philadelphia and was brought to Monmouth Junction. A sister who nursed him during his illness also contracted the disease. At a later date his father developed small-pox. All persons exposed were at once vaccinated and patients were isolated in their homes. After the recovery of the patients the rooms were thoroughly disinfected, and all infected clothing, bedding, &c., was destroyed. The total cost of the care of the six cases was \$230. The cases were mild in type, and in one of the cases the eruption appeared in one week from the time of exposure to the disease.

South River.—Three cases of small-pox occurred in South River during the year ending December 31st, 1901. The disease was contracted in each instance from

exposure to the infection in Sayreville, which is across the river from South River. Three houses were infected. The local board of health of South River constructed a hospital for the reception of patients, and free vaccination was offered. Upon removal of the patients the houses in which they resided were disinfected. All of the cases reported occurred in the month of December, 1901.

Sparta Township, Sussex County.—Following is a report by C. E. Dowling, M.D., of cases of small-pox occurring in Sparta township: A case of small-pox occurred about two miles east of this place on May 7th, 1901. The patient had been working at Wilkesbarre, Pennsylvania, there being several cases in that section, and came home about two weeks previous to May 7th, on which date I was called and found an eruption of papular nature, which changed into vesicles and pustules in the course of the disease, and pronounced it small-pox. The family and house were quarantined by me on the above date and by town officers on May 10th. The disease was confined to the one house, two members of the family being affected. Most of the clothing was burned and some pieces were washed and boiled in bichloride 1-500 solution. Walls and floors were washed with bichloride 1-500 solution. The cost of management of the cases was \$50. The quarantine was maintained six weeks.

Stoe Creek Township, Cumberland County.—One case of small-pox, brought from the infected district of Gloucester City, was reported to the local board of health on May 25th, 1901. Strict quarantine was kept and free vaccination offered by the local board of health. No other cases occurred.

Town of Union.—Cases of small-pox were reported in Town of Union as follows: April, 5; May, 1; December, 1—Total, 7.

Trenton.—The first case of small-pox reported in Trenton in 1901 occurred on December 20th, at 221 Elmer street. From the appearance of the patient it was evident that the eruption had been out at least six days when the case was reported. The man was immediately removed to the municipal hospital, the infected bed-clothing was destroyed and the ten members of the family were vaccinated. The room where the patient was ill was thoroughly wetted with bichloride of mercury and the other portions of the house fumigated with formaldehyde. At the end of the week three of the children became ill, and as soon as the eruption appeared the whole family was removed to the hospital. The three remaining children developed the disease after reaching the hospital and three of them died. The six children were unvaccinated. The adults in the family had all been vaccinated successfully when young, and none of them developed the disease. One other case developed in the person of a little girl who lived next door to the original cases. This case, although not reported until January 10th, should have been reported in December, as the character of the eruption showed that the child had been ill at least fifteen days. Total number of cases reported, eight.

Union Township, Bergen County.—In the month of June, 1901, fourteen cases of small-pox occurred at Kingsland, Bergen county, New Jersey. Quarantine was finally raised July 10th, 1901. Seven of the cases were confluent small-pox, two discreet and five mild varioloid. The cases occurred in an Italian colony, and the whole colony was quarantined until every person residing in the locality was vaccinated. The outbreak was checked by these precautions, and when the patients had recovered all premises were thoroughly disinfected.

Vailsburg.—Three cases of small-pox occurred in Vailsburg during the year ending December 31st, 1901. The first case occurred in the person of a lady who had

recently arrived from Marshall, Texas. Two other cases occurred, but the origin of these cases was not traced. Strict quarantine was enforced, and after recovery of the patient the premises were disinfected.

Weehawken.—One case of small-pox was reported in Weehawken in the month of July, 1901.

Westfield.—In July a case of small-pox was reported in Westfield, and the history of the case showed that the disease had been contracted in Brooklyn, where the patient was employed. A temporary hospital was at once erected and the patient removed to it. All persons that had been exposed to the disease were vaccinated and quarantined. Upon the removal of the patient the house and hospital were disinfected. The cost of the care of this case was \$850.

West Hoboken.—The following cases of small-pox were reported during the year ending December 31st, 1901: May, 1; December, 1—Total, 2.

West New York.—One case of small-pox occurred in this town during the year ending December 31st, 1901.

West Orange.—One case of small-pox occurred in West Orange during the year ending December 31st, 1901. The patient was a boy sixteen years old, who lived on Watchung avenue. He was taken ill November 28th, 1901, and the eruption appeared December 2d. All persons who had been exposed were immediately vaccinated and the case was quarantined. After the recovery of the patient the house was thoroughly disinfected and no other cases were reported. The origin of the case is obscure, although there was a history of another case having occurred in the factory in which the boy was employed. All the employes in this factory were vaccinated as soon as the character of the disease was determined.

Woodbury.—Following is the history of an outbreak of small-pox in the city of Woodbury, Gloucester county: February 8th, a boy by the name of Cleveland Wells, eleven years of age, became ill. An eruption showed itself on his person on February 13th, and on February 15th the eruption was fully developed. He was isolated on the 11th of February. On February 16th Dr. Gramm, of Philadelphia, made a diagnosis of small-pox. On the same day James Clark, eight years of age, and who went to school with Cleveland Wells, above mentioned was taken ill, and Dr. Gramm, on the 16th, stated that he was suffering from small-pox. He had left school on the 6th. Julia Cregan, a servant at the Wells' place, was taken sick with small-pox on the 25th and died in a few days. The fourth case reported was in the person of a sister of James Clark. It will be seen from the above that there were four cases reported. In addition to this it is supposed that two other cases have occurred. The history of the cases probably points to the fact that a sea captain who had returned home had the disease in a mild form, and that infection of other persons in Woodbury was due to exposure to him or to his house. All the houses where the disease existed were at once quarantined and general vaccination was practiced. All school children were vaccinated by order of the board of trustees and the public school was closed.

DIPHTHERIA.

Andover Township, Sussex County.—During the months of October, November and December a number of cases of diphtheria occurred in families living near Andover. Dr. J. C. Clark stated in his report that over thirty mild cases occurred before a physician had been called, and since that time thirty cases have

been reported. Four deaths resulted. The school-house became infected by the attendance of children having the disease in a mild type, and the local board of health finally caused the school to be closed until November 25th. This measure was effective, and with the careful disinfection of premises where infection existed the outbreak was controlled. None of the cases occurred on farms from which milk was supplied to creameries. Bacteriological examinations made at the State laboratory of hygiene, in Princeton, enabled the physicians to make an accurate diagnosis, which, on account of the mild type of the disease, was otherwise impossible in many cases.

Caldwell.—The following is the history of an outbreak of diphtheria supposed to have been caused by infected milk. On Thursday, March 21st, a communication was received from Mr. Leighton, health officer of Montclair, and a conference was held with him upon that date. The following facts were ascertained: Within five days previous to and including Thursday, the 21st of March, fifteen cases of diphtheria were reported to the local health authorities in Montclair. On investigating these cases it was ascertained that the supply of milk in each instance was obtained from the Fairfield Dairy Company. Examination was made of the dairy by Health Officer Leighton, and also specimens were taken from the throats of some forty men who were engaged in the milking operations about the dairy. Bacteriological examination showed that three of the men were suffering from diphtheria. The Montclair board of health called a meeting that evening and prohibited the sale of milk from the Fairfield dairy within the confines of Montclair. The dairy company issued a circular the next morning stating that, on account of diphtheria upon the premises, no further milk would be supplied until proper precautions had been taken. A visit was made to the Fairfield dairy, and notice was served forbidding the transportation and sale of milk produced, stored or kept on premises owned and occupied by that company. This notice bore date of March 21st. The suggestion was made to Mr. Francisco, superintendent of the company, that if new men were obtained to do the work about the dairy, and the men suffering from diphtheria were strictly quarantined, there would be no objection to at once beginning the sale of milk. On March 23d telephonic communication was received from Mr. Leighton stating that all precautions had been taken by the dairy company and that the restrictions placed upon the sale of milk therefrom would be at once removed by the Montclair authorities. A telegraphic release was forwarded to Mr. Francisco at once, and a written release followed.

Keyport.—During the year ending December 31st, 1901, an epidemic of diphtheria occurred in Keyport. Twenty-three cases were reported. The disease was of a very mild type and but three deaths resulted. The disease was so mild that it is possible that a number of cases occurred which were not reported.

Mays Landing.—Five cases of diphtheria occurred in this locality during December, 1901. The cases were quarantined, and after recovery of the patients the premises were thoroughly disinfected. The school was closed until the room could be cleaned. No other cases were reported and the school was opened December 30th.

Palisades Park.—A communication was received from the secretary of the local board of health of the borough of Leonia, in which it was stated that a number of cases of diphtheria existed in the borough of Palisades Park, and that the local board of health of that locality was inactive, and that there was danger that the disease might spread to adjacent boroughs. An investigation was made on September 4th, 1901, and the following facts were ascertained: The borough of

Palisades Park is situated east of the borough of Leonia, and its westerly boundary is along the Hackensack meadows. It extends in an easterly direction to the top of the hill and within two miles of the Hudson river. The population of certain portions of the town, and especially that portion lying upon the hilltops on its easterly boundary, is made up of settlements of Hungarians, Poles and Italians. These persons live in small houses, and the sanitary conditions are very unsatisfactory. Since February there have been over thirty cases of diphtheria and eleven deaths have occurred. The local board of health of Palisades Park has never taken any action to limit the spread of the disease. There has been no quarantine of premises. Persons have been allowed to visit those who were sick, but in case of deaths from contagious diseases no public funerals have been allowed. In one or two instances small sulphur candles have been burned in the houses for the purpose of disinfection. The board of education has refused to open the school on account of the existence of diphtheria. The local board of health has insisted that they had no money at their command to expend in an effort to limit the spread of contagious diseases. It was ascertained that the total appropriation for last year for health purposes in the borough of Palisades Park was \$15. The members of the local board of health had determined to send in their resignations. In an interview with the mayor the perils of the situation were explained, and a request was made that the borough council should at once appropriate necessary funds for the use of the local board of health. The mayor promised to call a meeting of the council and appropriate sufficient funds. In an interview with the president of the local board of health the details of the management of outbreaks of contagious diseases were explained and a meeting of the local board of health was called for the evening of September 4th, when definite action will be planned. One of the chief difficulties in the problem of controlling the spread of disease in this locality is the fact that the foreign population fail to send for a physician until the patient has been ill for a number of days and recovery is doubtful. Under the circumstances, the local board of health was advised for the time being to appoint a medical inspector, who should go through the houses every other day and ascertain whether there are any cases of contagious disease. It was also suggested that a rigid quarantine be enforced in one or two instances at least, so that the foreign population might be made to understand that they must obey the rules as laid down by the local board of health. Dr. Wyckoff, of Leonia, promised to attend the meeting of the local board of health of Palisades Park and assist them in any way in his power.

SCARLET FEVER.

Clinton Township, Essex County.—Notice was received July 19th from the assessor of Clinton township, Essex county, of the existence of a number of cases of scarlet fever in what is known as St. Peter's Orphan Asylum, located within the township. An investigation was made on July 21st, 1901. Four weeks previous to July 19th one or two cases of scarlet fever developed among the children in the institution. There are seventy two children under the care of the society. Since the occurrence of the first cases eight additional cases developed. Dr. Ill, of Newark, had medical supervision of the patients. All of the affected children were removed to a room on the western side of the building, separated from the other children, and a separate

nurse was placed in charge of them. All clothing from patients was at once taken to the laundry, boiled and washed, and it was evident that care was exercised to prevent the further spread of the disease. The origin of the cases was traced to a child that had come from home, and had only been in the institution three days when symptoms of the disease developed.

East Orange.—On Friday, June 28th, a telegram was received from East Orange requesting that an investigation should be made of an outbreak of scarlet fever. The following facts were ascertained: Within the three days preceding Friday, June 28th, sixteen cases of scarlet fever had been reported to the local board of health. These cases were located in different parts of the city. The cases occurred in fourteen different families. The local board of health had investigated any possible cause for the general infection, and in the course of the investigation ascertained that every one of the families in which the disease existed was supplied with milk obtained from the Borden Milk Company. The children affected with the disease had not been to any common meeting place, and no history could be obtained that would account for the cases being in such widely separated portions of the city. An interview was had with the Borden Milk Company's representative, and it was ascertained that all the milk which came to East Orange was shipped from Oxford, New York State. During the three days above referred to three cases of scarlet fever were reported in Orange, all of which were supplied with Borden's milk, and of fifteen cases reported in Newark thirteen obtained milk from the same source. The local board of health of East Orange, under the circumstances, stopped the sale of milk from the Oxford dairies, and Dr. Gray, the physician of the board, and an inspector were requested to go to Oxford and make an investigation. Meanwhile, the Borden Milk Company employed a number of physicians, living in Oxford and vicinity, to make a medical inspection of all families from which the supply for East Orange was obtained. Upon the arrival of Dr. Gray and Mr. Bowden in Oxford they were presented with the affidavits of these physicians that there was not a single case of scarlet fever upon any of the premises from which the milk was obtained, but that at Norwich, which is a short distance from Oxford, two hundred and thirty-two cases of scarlet fever had been reported. The investigation made by Dr. Gray gave no direct evidence of contamination of the milk supply at this point, but he expressed the belief that some of the milkmen had been going and coming from Oxford to Norwich and might have carried the infection in their clothing. The Borden company, twenty-four hours after the prohibition was placed against the sale of milk in East Orange, was permitted to supply milk coming from another locality, and the local board of health decided that it was best to prohibit the milk from Oxford and vicinity for at least ten days, or until all danger of any infection from that point was passed. Dr. Gray, in his report, stated that the system used by the company supplying milk was so perfected that chances of infection of the supply were reduced to a minimum and that great care was exercised to produce clean milk.

Newton.—At the request of the board of health of Green township, Sussex county, an investigation was made October 11th of an outbreak of scarlet fever. There had been a number of cases of scarlet fever in this vicinity, and all of them were traceable to an imported case. A number of the cases recovered without medical attention, and this was a factor in the distribution of the disease. Information was obtained that there were several places where milk was supplied to creameries and that the children of the dairymen were suffering from the disease. Two

of these places were visited. At Joel H. Brown's, near Greenville, there was a child ill, and two children had been sick with scarlet fever. Mr. Brown's wife was also suffering from the same disease. Mr. Brown was accustomed to take care of the family and also do the milking. A notice prohibiting the sale of milk from his premises was served. At Howell Hamilton's dairy it was found that there had been eight cases of scarlet fever and that the same conditions existed as on the dairy above mentioned. A prohibition notice was also served upon him. October 13th word was received from Mr. Brown that he had secured a man from outside to do the milking and that the milk cans were not taken into his home, but were left at the well, and the prohibition was therefore removed. On October 15th a similar statement was received from Howell Hamilton, and the prohibition was removed from his premises. There were sixteen cases of scarlet fever in this vicinity, occurring in four families.

Inspection of Streams.

During the year ending December 31st, 1901, the inspection of streams was continued. The Legislature has not provided any appropriation for this service, and the work accomplished has been performed by the chief sanitary inspector, assisted to some extent by the secretary.

Rahway River.—In the buildings of the Palmer Leather Company, located in West Orange, an extensive tanning business is carried on, and the refuse from the factory is discharged into a swamp, from which it finds its way by small streams into a branch of the Rahway river. A notice was served upon the Palmer Leather Company forbidding any discharge of factory liquid waste into the stream. Information was received from the company that the works would be shut down until some provision could be made for handling the sewage, and a later inspection showed that a filter-bed had been constructed by building a dike around a portion of the swamp, and into this the waste liquids were discharged. At the time of this inspection there was no evidence that the stream was being polluted at this point. From the Diamond paper mill, which is located in Millburn, there is a discharge of liquid waste from the factory, and there was ample evidence that there was pollution of a branch of the Rahway river at this point. Action was commenced against the factory for the purpose of securing an injunction, and the trial of this case, in Newark, occurred in October, 1901. At the Fandango paper mill, located at Millburn, binders'-board is manufactured. The waste from the mill is discharged into a branch of the Rahway river. Notice was served upon the owner to abate the nuisance, and a filter-bed has been constructed for the purpose of purifying the waste liquids before permitting the water to re-enter the stream. At Garwood the Copper Refining Company is located, and the discharge of liquid waste from these works discolors the waters of the stream, and the contamination at this point is apparent. The company was notified to stop the pollution of the stream. Action was begun by the fish and game commissioners and a judgment was secured, and it is understood that action will be continued until the contamination ceases. A number of premises located in Garwood were examined, and it was found that the house drains from eight dwellings discharge liquid household waste into the brook, which is a tributary of the Rahway river. All of these cases have been placed in the hands of legal counsel, and action will be prosecuted as rapidly as possible. During the year 1900 it was found that from a number of factories and dwellings in West Orange, and Orange, liquid waste was being discharged into the east branch of the Rahway river, and a notice, at that time, was served upon several factory owners. The result was that the amount of contamination was greatly lessened, but there are still a number of houses discharging liquid household waste into the stream,

and during the coming year it is the intention of the State Board of Health to take legal steps to stop these contaminations. The health authorities in West Orange and Orange are co-operating with the State authorities, and a list is being prepared of all points of contamination, and as soon as the evidence is secured legal action will be begun.

Rancocas Creek.—Various complaints were received in reference to contaminations of the Rancocas creek at Smithville, and an inspection was made of the premises of the H. B. Smith Manufacturing Company, and it was found that from the wash-rooms and closets, and also from the kitchen, sewage was being discharged into the Rancocas creek. Notice was sent to the owners to discontinue the contamination of the stream, and the matter was placed in the hands of C. K. Chambers, counselor-at-law, Mount Holly. The company immediately took action. A large cesspool was constructed and all sewage is conducted into this receptacle, and the contamination of the stream at this point was stopped. At Riverside, which is located below Mount Holly, on Rancocas creek, near the Delaware river, the water-supply for the borough is obtained from the creek. The Zurbrugg Manufacturing Company controls the supply. Both above and below the intake sewage was discharged from two factories into the creek. The local authorities of Riverside commenced action against the owners of the properties, and a system was introduced for the purpose of filtering the sewage before it was allowed to enter the stream. No action was taken by the State Board of Health in this case, as the sewage from Mount Holly is discharged into the Rancocas creek above this point, and the law which was passed in 1899 excludes all streams which were undergoing pollution at that time, so that the Mount Holly authorities really have legislative permission to use the creek below Mount Holly as a sewer. The authorities of Riverside, and also the owners of the public water-supply, were advised of the importance of securing a new source of supply, and at the present time negotiations are being carried on and plans drawn looking toward the accomplishment of this end.

Hackensack River.—In September, 1901, an inspection was made of a branch of the Hackensack river, near Tenafly. Upon examination five different premises were noted from which liquid waste was discharged into the brook which is a branch of the Hackensack river. A notice was sent to each of the owners, and no reply being received, the matter was placed in the hands of Mr. R. Wortendyke, counselor-at-law, Jersey City, for prosecution. By correspondence with Dr. Lansing, in Tenafly, who is the health officer of that locality, it was ascertained that in each instance the contamination had ceased, and therefore no further action was taken.

Crosswicks Creek.—From Crosswicks creek is obtained the water-supply for the city of Bordentown. The attention of the State Board of Health was called to the conditions in Bordentown affecting the water-supply, and frequent inspections have been made for the purpose of ascertaining the exact conditions. It has been found that a short distance above the intake of the water-supply a small stream discharges into the creek. This stream has its course through the city of Bordentown, and it was found that the liquid waste from three factories, a boarding school and thirty-eight houses was discharged into it. After the facts had been obtained the question of what action should be taken was discussed by the State Board of Health. The decision was reached that it would be unwise to take action against owners for the contamination of this supply, as the point of intake for the public water-supply is so located that not only is the water used by the city contaminated by the pollu-

tion of the brook above mentioned, but that at certain times of tide and under certain conditions the water obtained is from the canal and also from the Delaware river water which has already been polluted by sewage discharged into the river by the city of Trenton. The water, before being supplied to consumers in Bordentown, is passed through filters, and this improves its character somewhat. It was suggested to the local authorities that the solution of the problem is to secure a new water-supply.

Sanitary Administration in the Summer Resorts of New Jersey.

Every year the number of persons visiting the health and pleasure resorts of New Jersey increases, and it is the privilege of this transient population to be efficiently protected by the local authorities against the risks and dangers attendant upon the unrestricted spread of communicable diseases and against impure water, bad drainage and nuisances of every nature which affect the public health unfavorably. The laws now operative in New Jersey contain every necessary provision to enable local health boards to enforce suitable measures for the protection of the health of visitors in summer resorts, and there is no excuse whatever for official neglect of the precautions which are essential for the prevention of typhoid fever and for the restriction of all other communicable affections. The State Board of Health has endeavored, from time to time, to stimulate interest in sanitary matters and to improve sanitary administration in these localities, and with a view to ascertaining the exact condition in some of the resorts along the Atlantic coast an investigation was made of a number of places during the month of August, and the following is a report in reference to them:

Allenhurst.—This borough is located on the Atlantic coast, north of Asbury Park. It has a winter population of 100, and a summer population estimated at 5,000. The water-supply is obtained from six artesian wells, and analyses show that the supply is satisfactory, although during the summer of 1900 there were some complaints as to the character of the water. The borough has a completed sewer system, and the outlet of the sewers is at the foot of Elberon avenue. The streets and public grounds are well kept. There are but two hotels and no boarding houses. The ground water level is such that dry cellars can be secured. The servants in these hotels sleep upon the upper floors. Light is furnished to the borough by electricity and gas and the hotels are supplied with fire-escapes. Garbage and refuse are collected in covered wagons, and no complaints have been received during the summer in reference to this service. The refuse and excreta are conveyed to grounds located at the head of Deal lake. There are seven policemen employed in the borough. No board of health has been organized in the borough.

Asbury Park.—This city is located on the Atlantic ocean, fifty-two miles from New York. The winter population is 4,000. The summer population is estimated to be about 30,000. The water-supply of the city is obtained from artesian wells, and filters are used for the purpose of removing the iron contained in the water. A

complete system of sewers has been introduced, and the sewage is discharged into the Atlantic ocean. This method of disposal is not satisfactory, as at times the odors from the sewer outlet give rise to complaints. The streets and public grounds of the city are well kept. The last report of the board of health shows that there are 199 hotels and boarding houses in the city, having 6,608 sleeping rooms. The cellars and basements of the hotels are well kept. A thorough house-to-house inspection is made of all the residences, hotels and business places in the city, and unsanitary conditions when found are at once remedied. Refuse and excreta are removed from the borough under a satisfactory system and deposited upon a farm several miles from the city. The police and fire protection of the city is satisfactory. The reports of the local board of health of Asbury Park show that the health administration of the city has reached a high degree of efficiency. It is possible at any time for a person desiring to locate in Asbury Park for the summer, and, having the rental of any certain dwelling in view, to obtain detailed information in regard to the sanitary condition of the premises by writing to the local board of health. Permanent records are kept of each dwelling in the city, and these are corrected by frequent inspections. This method of house-to-house inspection is more thoroughly conducted in Asbury Park than in any other city in the State. Within the last few years improvements have been made in the collection of garbage and refuse, and steps are now being taken to secure the erection of a permanent isolation hospital.

Atlantic Highlands.—Atlantic Highlands is a borough located on the south side of Raritan bay. The population in winter is 1,700 and in summer from five to six thousand. The water supply of the borough is obtained from artesian wells and is satisfactory, although deposits of iron are complained of by some of the residents. Sewers have been constructed in the borough, and the outlet is under the dock into the bay. Streets and public grounds are well kept. There are three hotels in the borough. The lighting is obtained by electricity and gas. There are no fire-escapes on the hotels. Garbage and refuse are collected in covered wagons and taken to farms three miles out of the borough limits. Night-soil is dealt with in the same manner. Several complaints have been received by the local board in reference to the method of collection of night-soil. The local board of health has passed ordinances and systematic inspection is carried on. There has been no typhoid fever reported in the borough during the year, but several cases of malaria have occurred.

Belmar.—The winter population of this borough is 902. The public water-supply is obtained from four artesian wells, and about 100,000 gallons are pumped daily in the summer season. The number of dwellings connected with public water-mains is 260. The total length of the sewer system is eight miles, and 288 dwellings are connected with the sewer. The outfall of the sewers is into the ocean. Ashes are removed by private contract, and the removal of garbage is by private arrangement. There is no house-to-house inspection and the local board of health takes action only in cases where complaints are made.

Bradley Beach.—Bradley Beach is located on the shore of the Atlantic ocean, south of Ocean Grove. The population is 982. The water-supply is obtained from wells. There is no public system of drainage. The health organization of the borough is imperfect, and no effort is made in regard to house-to-house inspection, and no action is taken unless complaints are received or when cases of contagious disease occur.

Long Branch.—Long Branch is located upon the Atlantic Ocean, in Monmouth county. It has a winter population of over 7,000 and the summer population is increased to 15,000. The water-supply is obtained from the Tintern Manor Water Company, and surface water is filtered before it is furnished to consumers. A sewer plant has been erected within the city limits, and the sewage effluent is allowed to flow directly into the ocean. Streets and public grounds are well kept. There are forty hotels and boarding-houses in Long Branch, but there is no regular inspection of hotels. The city is lighted by electricity and gas. The collection of garbage and refuse is in the hands of a private company, licensed by the city council. Collection is made in wooden and iron carts. A cremating plant is under construction. There are a large number of privy vaults in the city, and the material from them is removed in iron carts to a point without the city limits. Garbage and refuse heretofore has been placed upon a field northwest of the city, but in future all materials of this character will be burned. There are thirty policemen employed in the city and the fire department is well equipped. The board of health, up to the present time, has been active, but at the time of inspection we were informed that no meeting had been held in five weeks. The city lacks systematic house-to-house inspection, and the local board of health, instead of ascertaining conditions which might be detrimental to the health of the inhabitants, waits until complaint is made before any action is taken.

Ocean Grove.—Ocean Grove is located south of Asbury Park. The locality is governed by the Ocean Grove Camp Meeting Association. The winter population is small, but during the camp meeting season the population is estimated to be about 30,000. The public water-supply is obtained from a series of artesian wells located west of the town. The sewage is discharged directly into the ocean. Streets and public grounds are fairly well kept. There is a large number of hotels and boarding-houses, but no record is kept of these by the local board of health and no systematic inspection is carried on. Refuse and excreta is taken out of the city limits and dumped upon farms. The public health administration is not entirely satisfactory.

Seabright.—Seabright is a borough located on a portion of the peninsula which lies between Shrewsbury river and the Atlantic ocean. The population is about 200 in winter and 1,700 in summer. This does not include a large number of summer residents who reside in Shrewsbury township, and which is directly west of the borough of Seabright. The water-supply is obtained from the Long Branch water company. The borough is sewered and the sewage is discharged into the Shrewsbury river. The streets and public grounds are well kept. There are three hotels in the borough. The height of the ground water level is such that cellars cannot be dug to the usual depth. The servants in the hotels sleep in the upper rooms and the apartments for help are well kept. The borough is lighted by electricity and gas. Garbage and refuse is collected by the arrangement of individual lot owners, and there is a necessity for additional supervision in this direction, as some complaints have been received in reference to it. There are two policemen employed. The local board of health is disorganized and there has been no meeting in two months. No regular house-to-house inspection is carried on, and the local board of health does nothing unless a complaint is received, but under such circumstances an inspection is made.

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Spring Lake.—The population of this borough is 526. The summer population is about 5,000. The public water-supply is obtained from artesian wells. Sewage is discharged into the ocean, and complaints have been received on account of the nuisance caused thereby. Streets and public grounds are well kept. There is no house-to-house inspection and no supervision of hotels and boarding-houses. Refuse and excreta are carted without the city limits. The public health administration is not entirely satisfactory, as there is a lack of systematic inspection, and no effort is made to prevent conditions detrimental to health unless a complaint is made to the local board of health.

New Jersey Sanitary Association.

The twenty-sixth annual meeting of the New Jersey Sanitary Association was held in the Laurel House, Lakewood, Friday and Saturday, December 7th and 8th, 1900. The attendance was fully up to the average and the interest exhibited by the members was unremitting during each of the three sessions.

The annual announcement contains the following statement:

The New Jersey Sanitary Association is composed of professors and teachers in our colleges and schools, municipal officers, health officers, lawyers, physicians, clergymen, civil engineers, sanitary engineers, architects, plumbers and other citizens of our State interested in sanitation as related to our homes, our schools and our municipalities.

Any citizen may become a member of the State association on application to the secretary or any member of the executive council on the day of meeting. The membership fee is two dollars per year, payable in advance.

The objects of the annual meeting are the presentation of facts, the comparison of views and the discussion of the methods relating to the prevention of sickness and the promotion of health. The association, also, through the annual meeting, seeks to impress upon the public the importance of securing wise and preventing harmful sanitary legislation and also to aid the State and local boards of health in their efforts to secure better administration of our health laws for the good of our citizens and the healthfulness and prosperity of our State.

By an arrangement between this association and the State Board of Health, a part of the annual meeting is devoted to such special subjects as relate to the work of local boards of health. Every local board should have present at the annual meetings its assessor, physician, inspector or some other active member. The information secured for the benefit of each locality far more than compensates for the slight expense.

Among the papers¹ read at this meeting were the following:

¹ Proceedings N. J. San. Assn., 1900.

HIGHER EDUCATION IN HYGIENE.

BY JOHN L. LEAL, M.D., PATERSON.

A great deal of attention has been given during the past few years to this subject as applied to those engaged in public health work. The interest in it and its present agitation is doubtless due to—(1) the rapid advancement of the science of hygiene and the more exact knowledge of its principles, laws and operations; (2) the existence of a number of hygienists who have had much practical experience by reason of long tenure of office in connection with public health work, or who hold positions in educational institutions in which hygiene is taught, or who, by reason of personal or humanitarian interest alone, have assisted, through the results of their practical work and laboratory experiments, in the advancements of the science; (3) the conviction of intelligent hygienists that the tendency and custom has been to entrust the application of the principles and details of hygiene to those not fitted by education or training for the task; (4) the knowledge that adequate facilities are not afforded for acquiring the necessary education and training; (5) the increasing general knowledge of the principles of hygiene on the part of the public and their demand for all the protection possible from the intelligent and thorough application of those principles.

The above being true, it would seem that it ought not to be difficult, or at least impossible, to attain this most important improvement and advance in providing the requisite education. Indeed, the time is ripe to take some decided step in this matter which is of such vital importance. The success of such a step would depend to a great extent upon the attitude of the various institutions of learning, whose co-operation it would be necessary to secure as the chief agency for imparting the required theoretical knowledge and, to some extent at least, the practical training. The present indications are that these institutions would answer such a demand if made upon them. The more progressive universities, colleges and technical schools seem to fully recognize the necessities of the case, to give to the matter their full sympathy and to be willing to extend their aid when once the exact form that aid is to take has been finally decided. The majorities of the boards

of trustees and the faculties of these institutions do not claim to be practical sanitarians, and therefore hesitate to initiate courses or departments the results of which might not prove satisfactory from a practical standpoint. Their position seems to be that those who are engaged in sanitary work, or who are interested in and have practical knowledge of it, should formulate the requirements, and then that they would be willing to fulfill such requirements. It cannot be denied that this position is a most reasonable one, and that it also throws the responsibility for future advancement in this line upon sanitarians themselves. It thus behooves all of those interested in the matter to come to some agreement as to exactly what is desired, how it can be obtained, and then endeavor to obtain it. Before we discuss what may be desirable, however, let us very briefly consider the system under which we have been and are working, as a basis for the changes proposed. The working force of a typical city board of health in this country is, with various local modifications, about the following: (1) the executive officer, whatever he may be called—health officer, health inspector, secretary, &c.; (2) special assistants, physicians, lawyers, chemists, bacteriologists, clerks; (3) officers, including inspectors of buildings, plumbing, sewers and drains, nuisances, markets, food and milk, disinfectors, sanitary policemen, &c. Of course the completeness and numerical strength of this force depends upon the size of the city and the pecuniary means at its disposal. The typical township board of health would be represented by an executive officer, usually a physician, and one or two men of the class of “inspectors” in the city boards. Now, as to the method in vogue of selecting these various officials. The executive officer is usually a physician selected, *first*, because the law requires that the position must be held by a physician, or, *second*, because it is the popular belief that because one is a physician it necessarily follows that he must be a sanitarian as well, and therefore, on account of his education and training, that he is more capable of performing the duties of such a position than others without such special advantages. The individual selections are determined, *first*, because those having the power of selection see or believe that they see certain qualities in the successful candidate which would tend to make him a valuable man in such a position, or, *second*, because of certain personal or even political influence which he may possess. Now, it is undoubtedly true that the degree

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of our medical schools, to the neglect
the attention of medicine. Indeed, it would seem as
had repudiated the latter and relegated
the functions of government. Medi-
the good old axiom that "an ounce of
cure," and has devoted all its
to a very great extent,
the physician newly ele-
position of executive officer of health has
the educated layman under similar cir-
but this advantage over the educated layman under similar cir-
circumstances: that his knowledge of kindred subjects and the form
of his mental discipline better enable him to take up the work, to
appreciate its importance, to understand its principles and to
apply its laws. It is necessary for both, however, to begin at what
is practically the beginning and to advance and develop with their
work as it unfolds. That many excellent sanitarians have been
and are being developed in this way cannot be denied, but as cer-
tainly is their development and success due to their own personal
initiative, and not to the existing system, but rather in spite of it.
Special medical assistants are usually selected in the same way
and for the same reasons as the executive officers, their duties
being, as a rule, however, confined to only one department of
hygiene, and that department being the one most closely allied to
their own profession. It is not so imperative that they should
be thorough sanitarians, as is the case with the executive officers.
Still, their practical knowledge and value for their work must
come as results of experience in the positions, and not as the
fruits of professional learning and training. The lawyers and
clerks have to do with functions only which pertain to their own
profession or business, with but the modifications common to dif-
ferent departments of law or lines of business. They serve the
science of hygiene in its relations to outside affairs, and need not
necessarily be practical sanitarians in order to satisfactorily per-
form such duties. The chemists and bacteriologists are specialists
in most important departments of hygiene, and have been specially
trained for their work before entering upon its practical applica-

tion in public office. Such office is not to them a school of development and growth, except what is incidental and normal to every earnest worker in any field of effort as results of time and greater experience, but an opportunity to make use of knowledge already possessed and a training already acquired. In filling these positions, as well as that of counsel or clerk, but one thing is needful, and that is to secure the best men available for the several lines of work. Of the "officers" of a board of health it may be generally stated that they are almost always selected for personal or political reasons, or, at best, on account of general intelligence and promise, and almost never on account of any special knowledge of or training for the work before them. To be sure, the inspector of plumbing is usually a plumber by trade, and the meat and market inspector a butcher or marketman, but their trade or business, in itself, no more fits them for the position than does the profession of medicine by itself render a physician capable of properly performing the duties of an executive officer. These officers all perform most important duties, requiring for their proper performance not only more or less general and special scientific knowledge, but the most exact technical knowledge and skill as well. What instruction they obtain is mostly perfunctory in character, and their technique is the result of imperfectly understood principles and of the parrot-like imitation of prescribed fixed and non-elastic methods. Yet these are the men to whom the practical application of the scientific principles of hygiene are entrusted in some of its most important details. The sanitary examination of premises, disinfection, inspection of markets, streets and sewers, dairies, examination of milk, meat and other food is expert work, and requires for its proper performance educated and trained experts, the same as in other branches of science and even in business. That some have been able to satisfactorily perform such work without previous special education and training is not a contradiction of this statement, but simply means that, owing to favorable conditions or strong personal qualities, they have succeeded in utilizing the time spent in actual practical work for the acquiring of the necessary education and training. But during such time their work must of necessity have failed to reach the standard desirable or of that of their later work, and the public interests must correspondingly have suffered.

Now, the above being a fair statement of the present status of our working sanitary force, and it being granted that such status is not a satisfactory one from the standpoint of the public good, what is to be done in order to correct the evils existing and to secure the greatest results possible from the best practical application of the laws and principles of hygiene? It seems to me that two courses are indicated: *first*, to provide means for the proper education and training of executive officers of health and subordinate medical and other officers; *second*, to make it impossible for any except those so educated and trained to hold these positions. It is impossible for me, within the limits of this paper, to lay down a curriculum for the education of these officers except in the barest outline. As a basis for discussion, I would divide the proposed expert sanitary education into two classes: *first*, that for executive officers and their medical assistants; *second*, that for the subordinate officers. The education of the executive officer should consist, in the first place, of a good general education as a groundwork for what is to follow; in the second place, of a thorough knowledge of those parts of the various sciences and trades required for the proper understanding and utilization of the principles of hygiene, such, for example, as the sciences of general and veterinary medicine, natural history, botany, biology, chemistry, mineralogy, geology, engineering, architecture, &c., and such trades as are involved in the construction of buildings, sewers, sewage disposal and water works, &c.; in the third place, of a thorough training in and knowledge of the science of hygiene; in the fourth place, of a thorough training in the practical application of the knowledge thus acquired. The most promising means at hand for the imparting of such an education and training seems to me to be the medical school. In making this statement I do not wish to appear as though expressing the opinion that an executive officer of health should necessarily be a physician, but I do believe that medicine is more closely allied to hygiene than is any other science; that it has done more for it, and that its training begets in its student a mental attitude and aptitude which is most conducive to the correct interpretation of its principles and application of its laws. The special course required could be made either an undergraduate, elective or a post-graduate one, in either case preferably granting a special degree. For those not desiring to obtain the degree of M.D. as well, special arrangements could be made.

for imparting the essential medical knowledge only. The medical school has for such a course a numerous and promising clientele right at its hand; the necessary changes and additions could probably be made at less expense, and more scientific interest in its standing and success would be likely to be aroused than in any other class of educational institutions. The education of the subordinate officers should be on the same lines as that of the executive officers, but, naturally, not carried nearly so far. A good common school education should be required, and to that added such knowledge of hygiene and kindred sciences and subjects as would enable them understandingly to carry out the details of sanitary work as ordained by law or directed by superiors. Both the executive and subordinate officer should receive practical instruction and training in the laboratory, the workshop and in the routine work of boards of health. Undoubtedly some such system of practical instruction and training could be developed in connection with departments of health as is enjoyed by the student and young graduate of medicine in the hospitals of this country and Europe. The best opportunities for the education of the subordinate officers, it seems to me, could be offered by the technical, mechanical and agricultural schools and the scientific departments of colleges and universities. Especially should all State institutions make adequate provision for such a course, on the ground that it is for the public benefit. But, granting that my premises in this matter of education and training are true and my recommendations are adopted, what will be the result? Unquestionably there will be developed a corps of sanitary experts and capable assistants, but will their merit be recognized and the public service improved by their employment in the positions for which they are specially trained? I unhesitatingly answer, no. Local feeling and influence would be too strong, and mere fitness for these positions would not be sufficient alone to obtain them. Yet another step, then, is necessary if we expect to obtain the results indicated, and that step is the vital one of securing such legislation as will make special training and fitness essential to such appointments. The exact form of such legislation is a matter of detail, but the following are the points which, in my opinion, are essential: *First*, that no candidate should be eligible for appointment to the positions above mentioned unless he possess a certificate of fitness from the examining board; *second*, that the examining board be the State

for interior use. The high cost, though less than tin-lined iron, is a disadvantage.

Cement-lined iron pipe, when well made, is cheap, durable, unobjectionable and highly satisfactory as a service pipe. It would be a trifle clumsy for interior use.

Wooden pipe, as a service pipe, is much cheaper than iron, is durable, has no effect on the water, and while it formerly withstood a pressure of only twenty-five pounds, it is now made to withstand two hundred pounds, and is coming into more extensive use, especially in the West.

It may clearly appear that no one kind of pipe could be selected as the most sanitary and at the same time most economical for all waters, and that each city or town should have its proposed water-supply first examined by an expert to determine its character, and then adapt the pipe to the peculiarity of the water. It is fair to state that certain metallic pipes for corrosive waters are neither sanitary nor economical and might well be placed under official control.

With regard to gas-pipes and gas-fixtures, we have a subject at once interesting and of singular importance from a sanitary standpoint. It should not be difficult to convince an audience of this character that illuminating gas is most dangerous to breathe; that the common pipes and fixtures which hold this gas within our dwellings are faulty and extremely untrustworthy; that the mortality and morbidity caused by breathing this gas are large, or that interference by public authority should be seriously considered. The substitution of water-gas for coal-gas in some of our cities has increased the most poisonous agent—carbonic oxide—from six or seven per cent. to about thirty per cent., although this was not necessary in order to make illuminating gas an active poison to breathe. The records of accidental and suicidal deaths from illuminating gas are to be seen in every city, and are evidences of the fatal character of this agent. The deaths in Boston from this cause for the last six years were in 1894, 33; in 1895, 28; in 1896, 40; in 1897, 43; in 1898, 56, and in 1899, 48. There are no public records of illness produced by this or any other agent, aside from infection, so that we are obliged to seek information upon this point from such private sources as may be at our disposal.

I am tempted to quote here from a recent account of several

interesting and severe cases given me by a keen and trustworthy observer:

"The family of Mr. A. consisted of a man, wife and five children, from twenty to two years of age. During February and March, 1898, several of the children suffered from onychia, and one daughter had several indolent boils, one on the leg and one on each forearm. These boils were slow in forming, and when opened gave a discharge of thin, bloody pus. In fact, they partook more of the nature of an abscess, due to an injury, where there would be an extravasation of blood. The mother also had one finger affected by onychia. The father and oldest son escaped, not being at home much of the time. These two showed good color and were in fair physical condition. The rest of the family showed pallor and all complained of slight headache and fitful appetites, with a heavy feeling of general uneasiness. Under tonics and with the approach of spring sunshine, recovery followed. Several times I called the father's attention to the fact that there must be a leak of gas in the hall, as I noticed a peculiar, indescribable odor, which I had always found associated with a slight leak of gas. At the time I did not associate the escape of gas with the attacks of onychia, &c. In December, 1899, Mrs. A. gave birth to a strong, healthy child. Mr. A. was at home the greater part of the time during the winter, at work on building plans. The nurse remained with Mrs. A. six weeks. Before the baby was a month old the same attack of onychia, &c., started with the child, the oldest daughter showing boils as before. This time the father had two fingers affected, and the baby, at the age of five weeks, had one finger affected. The nurse, when ready to leave at the end of six weeks, had one onychia started. The oldest son was at home but little, and he escaped again. This time I noticed the odor of gas at times, and noticed the same indescribable odor referred to about every time I went to the house. The house was double, and on inquiry I was told that the family in the other side were also suffering in the same way. This time I associated the leaks of gas with the occurrence of the boils, &c., and had the father report the affair to the board of health. The gas-pipes were tested, numerous slight leaks were found, and when the pipes and fixtures were put in good order immediate improvement was the result, and the onychia, which had shown in crops before, did not re-appear after the repairs had been made.

"The family of Mr. E. consisted of father, wife, a child two years old and one four weeks old. Mrs. E. was confined about December, 1899. The baby was a strong one, weighing ten pounds. When the child was four weeks old I was asked to look at some spots on the face of the hardy boy of two years. These spots, at first glance, looked very much like ring-worms, but on careful examination they were found to be erythema circinatum, and later other spots showed on the face and arms, which partook of the form of erythema iris. When the baby was six weeks old quite a crop of spots suddenly developed on both legs; these were typical spots of erythema iris. In about three weeks more the mother showed the same eruption. This family moved out of the house before the winter was over and improvement followed, and at the same time there was no more indigestion with the father and mother and child two years old. I had noticed a faint smell of gas in this house, and called the father's attention to it even before the eruptions appeared. Both he and his wife had noticed the odor of gas in the hall. As the family expected to move out in a short time no report was made to the board of health."

From like sources I have been gathering material for some time, and shall, in a future report upon this subject, be able to give data as to the extent to which tenants are made ill by illuminating gas which escapes in small quantities from faulty pipes and fixtures. I am prepared, however, to state my convictions in advance of further data, that a faulty and leaking condition of gas-pipes and fixtures within our dwellings, counting-rooms and other enclosed spaces is extremely common, is, without doubt, the cause of much discomfort and illness, and that such ill effects are a hundred-fold greater than has ever been caused by so-called sewer-gas. If you should examine some specimens of gas-pipe and gas-fixtures which are to be found in the market and which are being used, you would find piping too thin to bear a respectable thread for connecting purposes, and you would find cocks and other fittings too light and otherwise faulty to be trusted for ordinary use. The cement in use for stopping leaks and sealing joints is readily dissolved in illuminating gas, and should be substituted by white or red lead.

In 1897 the Legislature of Massachusetts, recognizing the need of safeguarding the people against the dangers incident to poor materials and workmanship in the business of gas-fitting, passed an act which made it necessary for all gas-fitters to be examined

and licensed. It also authorized the board of health and building commissioner to issue regulations for the materials used and work performed under said act. A few quotations from this act may be of interest in this connection:

"No person, firm or corporation shall engage in or work at the business of gas-fitting in the city of Boston after the first day of October, in the year eighteen hundred and ninety-seven, either as employer or journeyman, unless such person, firm or corporation has received a license therefor in accordance with the provisions of this act.

"On and after the first day of October, in the year eighteen hundred and ninety-seven, no building shall be piped or fitted for gas, nor shall any repairs be made in such piping or fittings, nor fixtures placed, unless a permit shall be granted therefor by the building commissioner.

"All materials used and work performed under the provisions of this section shall be subject to such regulations as shall be made by the board of health and the building commissioner.

"The board of health of said city, by its inspectors, shall, from time to time, as it deems proper, inspect the gas-fixtures and appliances in any building, and shall make such requirements relating thereto as it deems the public health requires, and the owner of such building shall comply with such requirements.

"Any person violating any of the provisions of this act shall be deemed guilty of a misdemeanor, and shall be subject to a fine not exceeding one hundred dollars for each offense, and if such person has received a license under this act his license may be revoked by the building commissioner."

Under the provisions of this act we instituted an examination of the gas-fixtures and pipes in different blocks of dwellings in Boston, taking both old and new houses, and found, by the mercury test, from two to ten leaks in 89 per cent. of all the houses examined. This was, to some extent, a surprise, but a portion of these leaks would be accounted for by the fact that the pressure of the test given was considerably greater than that of the gas in the pipes. The pressure used was intended to find, not only the leaking pipes and fixtures, but those also which were near to the point of unworthiness.

We have adopted regulations, a copy of which I will present for your criticism, but as they are the first and only ones of the kind which I have seen, I beg your consideration for my share of their shortcomings. We are treating all complaints connected with gas-pipes and gas-fixtures as we do defective plumbing, and we feel satisfied that our legislative interference was timely and wise. At first some of the large manufacturers protested their displeasure and said that they would not make fixtures to comply with the Boston regulations, but they have since, in equally forcible terms,

praised our efforts to rid the market of faulty and unsafe fixtures, and are making all the goods we want.

In conclusion, I would say that the exercise of reasonable regulations to control the use of faulty and untrustworthy pipes and fixtures for water and gas, and to prevent unsafe and dangerous methods of workmanship in construction and repair, can impose no hardship upon any good citizen, would afford much security against dangerous conditions and be wholly consistent with many other worthy efforts in behalf of the health and safety of the people.

THE PRACTICAL USE OF VITAL STATISTICS.

BY F. L. HOFFMAN, F.S.S., NEWARK.

Vital statistics, in the words of Dr. Newsholme, "is the science of numbers applied to the life history of communities and nations," and this definition being accepted, we are at the outset confronted by a matter of general importance, since there are none of the people of this State so high or so low but that to them life has its value in direct proportion to its duration. Time was when mankind believed that "whom the gods love die young," but this doctrine of fatalism no longer prevails in the light of modern medicine and sanitary science, for both of these efforts for social betterment and the amelioration of the conditions under which the people have to live could not exist but for the modern science of vital statistics, than which there is no field of research more promising of useful and practical results.

It has been necessary for me to confine myself in this discussion to mortality statistics, since even a superficial consideration of the other branches of the science dealing with the statistics of marriages, divorces and births would consume more time than I have at my command. But, manifestly, the mortality statistics must needs be looked upon as the most important branch of the science, since they affect more directly the interests and the welfare of the living people of this State. Although I readily recognize the great social value of the statistics of marriages, divorces and births, I personally have had but little opportunity to investigate these subjects.

My discussion as to the data of human mortality will be largely confined to the conditions as they exist in the State of New Jersey and as they are made plain to us by the facts already in our possession through the efforts of the State Board of Health since 1878. Data of some historic value have been collected for previous years, but as regards the State as a whole we have no information of scientific value for years previous to 1878. For some of the counties, especially for Essex, we have information of value for years as far back as 1859, in a report on the Health and Mortality of Newark, N. J., by Dr. Edgar Holden, for the period 1859-78. Another valuable paper on the Climatology and Diseases of Essex County is to be found in the transactions of the Medical Society of New Jersey for the year 1877, in which, also, vital statistics for years previous to 1878 are incorporated in considerable detail. Since 1878, and to June 30th, 1899, there have been recorded in this State 550,955 deaths, and of these records and their practical value I speak to you this evening.

The essential facts known to us as to this large number of deaths are—*first*, the year of occurrence; *second*, the ages of those dying, by certain specified groups of years; *third*, the sex; *fourth*, the causes, arranged according to reasonably well-defined groups of diseases; *fifth*, the locality, with a reasonable degree of precision. More details would, of course, be desirable, more accuracy would be of great value, but on the whole, as the information has been made public, it is of practical value to the State, to the medical profession and to the public at large. This information is sufficient to approximately indicate the rise or fall of the general death-rate and the corresponding increase or decrease in the longevity of the people of this State. The information is not as useful, as it could easily have been made had those in charge of the registration and publication of these statistics been more liberally supported by the State in their arduous efforts, but even in their present condition they are a valuable means of indicating to us the steady progress which has been made in this State during the past twenty years. It is but proper that mention should be made of one to whom we are largely indebted for the good work which has been done during a large part of this period, namely, Dr. E. M. Hunt, formerly the Secretary of the State Board of Health.

Our information as to the mortality in this State is supported

by the census reports made for the past fifty years on the mortality of the United States, but in particular by the life tables of New Jersey, which have been incorporated in the census reports of 1880 and of 1890.

A careful study of this available body of information, really the vital history of the people of this State, is indeed not only a most interesting subject, but one of great promise of practical results. The first fact which is impressed upon us by a study of the life tables of the two census years mentioned would indicate that the sanitary progress, of which we hear so much, has not affected a large portion of our population, as is commonly supposed. Unquestionably, immense progress has been made and almost wonderful results have been accomplished in the direction of diminishing the mortality of children under the age of fifteen years. As an illustration I may mention the fact that if we take the three years, 1879-81, and compare the same with the last three years, 1897-99, we have only 24,208 deaths under twenty years of age in the latter period, against 28,880 deaths under twenty years during the earlier period, although during the same years the population has almost doubled itself. But this gain in longevity at earlier ages has not been made at the ages past middle life, and we have a pertinent illustration in support of this theory in the two life-tables for New Jersey, published in 1880 and 1890, showing that while in 1880 the expectancy of life at age twenty-five was 39.8 years, in 1890 it was only 37.4 years; that while in 1880 at age fifty the expectancy was 22.3 years, in 1890 the expectancy was only twenty-one years. In other words, the mortality at older ages is to-day higher than it was twenty, or even ten, years ago. I cannot burden this paper with statistics on the subject, but I hope to add a series of tables in an appendix to this paper when the same is finally published in the transactions of the association.

At present it is impossible to point out definitely and precisely the causes responsible for the unquestionable increase in the mortality at ages above twenty, because we have not the detailed information as to the causes of death, which would be necessary for a thorough and complete study of the subject. I understand that these imperfections will be largely done away with in future reports under the new law, according to which the Bertillon system of classification will be adopted, and I sincerely trust that, together

with this improvement in disease classification, there will come a corresponding improvement in the collection of more detailed information as to the ages at death. To make our vital statistics of more practical value the ages at death, together with the corresponding causes, must be given for single years under the age of five, and for five-year periods over the age of five. It is only in this manner that we can arrive at a definite conclusion as to the age incidence of disease and the causes which are responsible for the present excessive mortality at ages over twenty. But what is most needed in addition to a more complete registration of causes and ages is detailed information as to the occupations at death. At present we have absolutely no knowledge as to the relation of disease occurrence in different occupations, and it is in this direction that the greatest practical value of vital statistics finds its logical explanation.

As the result of frequent and comprehensive investigations, I am satisfied that there is no subject deserving of more thorough investigation and study on the part of our physicians, and those in charge of the sanitary interests of our different towns and cities, than the intimate relation which unquestionably exists between occupation and mortality. There are in this State trade centers where industries of a special order are carried on on a very large scale, and as such we may mention the pottery and rubber industries in Trenton, the glass industry in southern New Jersey, the hat industry in Orange and Newark and the silk industry in Paterson, yet we know nothing of determining value as to whether these industries are responsible for the increased mortality at ages over twenty, of which I have spoken. It is true—and we may speak of this with pride—that special investigations have been made by disinterested students of the subject and that reports of great value have been published in the annuals of the State Board of Health and of the State Bureau of Labor Statistics. No reports of any other State Boards of Health contain such precise and satisfactory information as to the diseases of workingmen employed in the principal industries of the commonwealth. Commencing with 1878, we have in the reports of the State Board of Health a series of valuable papers on the diseases of hatters, of potters, of glass-workers, of rubber-workers, &c. Commencing with 1889 and terminating with 1895, we have in the annual reports of the State Bureau of Labor Statistics exceedingly valuable and

suggestive inquiries into the trade life of workingmen, not only in the principal manufacturing industries, but also in other dangerous and unhealthy occupations. No State Bureau of Labor Statistics of any other State in this Union has ever published so valuable and suggestive a series of statistics, than which I can conceive of no more promising field of inquiry and of practical general utility. Very little in this direction has been done for the past ten years, and it is my plea to you that our special efforts in this direction should not be relaxed. We should not be satisfied with what has been done in the past, but should enlarge our scope of inquiry—supplement our limited body of observed facts with a large body of statistics collected by the State Board of Health as to the diseases of workingmen employed in the useful and productive trades and industries of this State.

Valuable as the investigations of the State Board of Health and of the State Bureau of Labor are to those who are most interested in the subject, they fall short in that they have not the support of a large series of observed facts to be found in the death certificates of those whose lives have terminated in this State during the past twenty years. I would urgently recommend that, for the practical use of our vital statistics, we should have in the future a detailed and comprehensive table, showing for all of the principal occupations or industries the causes of death according to age periods. That this task is not impossible, or even very difficult, is illustrated in the excellent reports of the health officers of Sheffield and Blackburn, England. These reports can well serve as a model for our own State Board should it appear to be possible and feasible to undertake the construction of occupation mortality tables. I am fully aware of the inherent difficulties which accompany such inquiries. I fully realize the difficulty of obtaining exact information as to the occupation at death, but it is not for us to be discouraged by such difficulties, which all of us who are familiar with the excellent and useful reports published under the direction of the Registrar General of England every ten years know can be solved.

In certain directions an improvement of our present statistics is easily possible. There should first be added to the death certificate a second question as to occupation, stating the industry or trade in which decedent was engaged at the time of his or her death. To explain to you the meaning of this point I will say that at present

a death certificate may contain a statement of the occupation of decedent at the time of his death, as that of a molder, yet unless it is stated that he was a molder in a pottery he would be classified among iron molders or stove molders, as the case might be. Similar cases could be mentioned, as, for instance, engineers, where we have no information as to whether the man was a stationary engineer, employed on a railway, or possibly a civil engineer, but if the second line is added, referring to our first illustration, it would have been stated that decedent was a molder in a pottery, and his death in that case would have been accurately classified. I would therefore suggest that the State Board should adopt a new death certificate, in which the first line, referring to the occupation, would merely ask the question as to "occupation at death;" the second line would ask the question "industry or trade at death," and by an answer to these two questions we would obtain the accurate and necessary information demanded for the best interests of the working people of this State. A third question could be added, which would materially increase the value of these statistics, though it is not of so much importance as the second question suggested. It would be desirable to have a definite statement as to whether decedent, at the time of his death, was an employer or an employe. Manifestly, it is a very different matter whether decedent was the owner of a pottery or a working potter at the bench. I firmly believe that if we could obtain this information we would very materially enhance the practical value of the vital statistics of this State.

But a further decided and material improvement in this direction is possible through a co-operation between the Bureau of Labor Statistics and the Bureau of Factory Inspection. The reports of the latter are at present of practically no value for the study or solution of questions pertaining to the trade-life and disease or accident liability of men employed in the unhealthy or dangerous industries of this State. I can conceive of no practical reason why so large an amount of routine information should be published, which can serve no useful purpose except that of record (and the reports are practically limited to this information), and why the energy and the effort expended in this direction should not serve the more useful purpose of placing before the people of this State information of value as to the real sanitary condition of factories and the health factors affecting our working people

in the manner in which this has been done for so many years in the reports of the board of factory inspectors of Great Britain. Many of the reports of our factory inspectors of other States are, in this respect, of far greater value than the reports published by our own board of factory inspectors, and I believe that if the subject were thoroughly investigated by a committee of the Legislature or by disinterested citizens of this State there would be inaugurated an improvement which would make it possible for those who are interested in the subject to realize fully the present state of factory life in this commonwealth. It would be possible, on the basis of the statistics and supplementary information collected by the co-operation of the State Board of Health, the State Bureau of Labor Statistics and of the State Board of Factory Inspection, to produce a body of indisputable facts, on the basis of which it would be possible to frame more scientific rules and regulations by which our working people, engaged in the more useful pursuits of life, could be better protected than they are at the present time and as they fully deserve to be.

These statistics of mortality by occupations and the supplementary information as to the sanitary state of our factories would have a secondary practical value to a large number of physicians, who, in the light of published facts and on the ground of their own experience, verified and supplemented by such facts, would realize the almost boundless opportunity for the study of diseases of working people employed in dangerous and unhealthy occupations for the purpose of developing special ability, which in time will give us a class of medical specialists of the diseases of workingmen, as we now have such specialists for diseases of the eye or ear and for other parts of the body. Certainly no class of specialists is more urgently needed, and none are likely to make more rapid progress in their own material welfare. The increase in general intelligence among our working people to-day, justly considered the most advanced industrial workers in the world, will soon create a distinct demand for more satisfactory and reliable advice on matters pertaining to illness and casualties directly the result of the industries in which our people are engaged. The advice of such specialists will be respected and men will act thereon, and, if necessary, change their occupation or change to another branch of their occupation less dangerous or less injurious than the one in which they may be engaged and in which they

may have developed diseases in their incipient stages, not sufficiently advanced to be beyond improvement or complete recovery. Much has already been done in this direction by a few devoted and intelligent physicians, but, most of all, by such men as Dr. Arlidge, the English authority on diseases of men employed in the potteries. There will come a time when we will coin a new term in medicine and speak of industrial medicine just as we to-day speak of industrial chemistry, and both sciences or arts will be most closely allied to each other.

I have limited myself to this one illustration of the value and utility of vital statistics, for unless we have more accurate information and a larger body of collected data as to the diseases of our working people, supported by accurate and extensive statistics as to the deaths in different occupations and the ages at which the deaths occurred, the development of industrial medicine will not be possible. What is true of the necessity of such statistics for the purpose of industrial medicine is equally true of all other branches of medical inquiry into the longevity of our people as affected by other determining factors, such as surface geology, proximity to forest areas, of seashore and mountain climates, and many other factors which unquestionably have a direct influence upon the health of the people of this State. To enhance the practical value of the collected vital statistics would require in every locality a sincere and genuine interest in the local phenomena and the factors making for a long or a short life.

We unfortunately have, first, developed but little of this local spirit of inquiry, and, second, a public appreciation or request or requirement for published data as to the local health conditions. In curious contrast to the excellent work which has been done by the State Board of Health for so many years in publishing practical and useful information for the State as a whole, the local boards of health in New Jersey have published practically nothing of value, with the notable and recent exceptions of the cities of Asbury Park and Montclair. Some advance has also been made in the city of Newark, but none in proportion to the immense interests which are involved. For our other large cities, especially Trenton, Camden, Jersey City, Paterson and Orange, we have no health reports in such detail as they are required for the best interests of the people of these cities. There is absolutely no reason why the cities of this State should not follow the example of other

large cities in this country and publish annually a separate health report, containing detailed information very much along the line, as has been done in so excellent a manner by the health officer of the city of Montclair, to-day perhaps the healthiest suburban city within fifty miles of the city of New York. In few of our States is it possible to supplement such local reports of all the necessary information as to geology, climate, water-supplies and industrial statistics as this is possible in New Jersey. No other State has so thoroughly equipped a Geological Survey in the hands of men who have given primary consideration to matters of immediate and practical importance, while at the same time not neglecting matters of remote importance. Our State Weather Service has published reports of a very high degree of usefulness in all matters of local importance, and as regards the State Bureau of Statistics, it has also contributed its share of information of value to the health officer in supplementing his conclusions as to the local conditions making for a long or a short duration of life. It is much to be regretted that the reports of the State Bureau of Factory Inspection cannot be included in this praise of our State departments of supervision and investigation of subjects directly or indirectly affecting public welfare.

I cannot refrain on this occasion from calling your attention to a matter directly connected with the extension or development of the practical utility of vital statistics, which, but for urgent necessity, I would gladly have left out of consideration, because it is to me a painful duty. You are all aware that in this State our vital statistics are in the first instance collected by the city clerks, and while there are certain reasons why this should be the case, in the light of the development of modern preventive medicine it is no longer desirable that this duty should fall to a class of men totally unfamiliar with the medical aspects of the data they are expected to register for the use of medical practitioners and sanitarians. This is not as it should be, and I urgently recommend that early steps be taken tending to a change in the law and transferring this important duty from the city clerks to the local boards of health or to a medical registrar of vital statistics especially appointed for that purpose. In certain other States we have a still more antiquated system by which the Secretary of State is made the custodian of the vital statistics, and under whose supervision the statistics are compiled, published and analyzed. This

is contrary to the present purpose of collecting vital statistics, since one totally unfamiliar with the essential requirements and needs of the science cannot be expected to do justice to the task imposed upon him. In consequence of this anomaly, vital statistics are, in many States, collected without due skill and proper consideration of important details, while at the same time they are not in time placed before a trained medical observer for immediate consideration, verification and correction. Gross errors must needs result from so antiquated and unwarranted a practice, which owes its origin to a time when certificates of marriage, birth and death served merely the legitimate purpose of establishing proofs of identity, but at the present time the legal aspect of these certificates is but subordinate to the far more important one of the State supervision of the public health, and hence the urgent necessity that the duty of collecting vital statistics in the first instance be transferred from the city clerk to the medical officer of health or to a duly-appointed medical registrar of vital statistics.

I cannot do better than illustrate the importance of this point by a reference to a slightly different matter, which at the same time will make clear to you the inexpediency of placing the collection, and even worse, the analysis, of vital statistics in the hands of a State officer not directly connected with the sanitary administration or the preservation and improvement of the public health of the people of a State. Curiously enough, the illustration is furnished by the State from which you would least expect so sorry an exhibition of ignorance and perversion, if not desecration, of a high public office, and at the same time of such utter indifference, if not contempt, of public requirements and public needs. In the State of Massachusetts vital statistics are also in the first instance collected under the authority of the Secretary of State, and it is by the authority of this same officer that the returns are annually published and analyzed by someone designated for this purpose. For forty-nine years, ending with 1890, this duty was delegated to men trained in public health matters and thoroughly familiar with the science of vital statistics, who were deeply interested in the development of the highest degree of accuracy and skill and who desired to make the vital records of the State attain to as high a degree of public utility as possible. During these forty-nine years the science of vital statistics had been more highly developed in Massachusetts than in any other

State of the Union, and the registration reports, edited by the foremost men and authorities in the science of vital statistics, had reached a point of public approval such as has never yet been attained by any other State of this country. One would have expected, where so high a degree of public utility had been reached and where this important duty of study and analysis of the vital records had been developed to the complete satisfaction of the public, as expressed in the medical journals and other competent channels of public opinion, that it would have been impossible to ruthlessly destroy or to tear down the work of earnest men for half a century. Yet without warning, without right or justice, the Secretary of State in 1891 transferred this important duty away from the Secretary of the State Board of Health to an unknown individual, who has since, to the discredit of Massachusetts, made the registration reports of that State not only a sorry evidence of his own ignorance, but an evidence of the indifference of the intelligent people of Massachusetts to an act of iniquity on the part of a high officer of State such as is, probably, without a parallel in the history of vital statistics in the civilized world. The registration reports of Massachusetts, issued since 1890, contain, not hundreds, but thousands of errors, the majority of which are inaccuracies and misstatements which even a high school graduate, trained in simple arithmetic, would not be expected to make. The reports are full of fallacies, full of discrepancies, and are to-day a discredit to the people of Massachusetts and a discredit to the science of vital statistics and a direct step backward in the development of the point to which I have called your attention, namely, the development and extension of the practical uses of the science of vital statistics.

I would not have spoken of this perversion of a high public duty and of the undoing of the good work of able and earnest men for half a century were it not that I believe it to be our duty to recognize dangers which confront us in this State. I believe that it is only by the strictest vigilance, exercised on the part of the public and of individuals who have the best interests of the people at heart, that so difficult a task as the one in which you are engaged can be carried successfully onward from year to year. The results which follow the efforts of sanitarians are always remote and more often benefit future generations than the people of the time who have to bear the immediate burden of expense. Hence

this digression into a chapter of vital statistics, which to my mind records the most unfortunate and shameful betrayal of a public trust.

In conclusion, I may be permitted to touch once more, if ever so lightly, upon the value of vital statistics to the people of this State in other directions than the specific one of the inquiry into the disease of the working people employed in the different industries recognized to be either unhealthy or dangerous, or both. We are in the last year of a century which marks a progress in sanitary science during fifty years such as has not been made during all the thousands of years of civilization which have preceded it. I believe it is not going too far to say that at no time in the world's history have the people been housed as well, nourished as well, and in all respects lived as long and as well as the majority of our people do at the present time. But the problem which will confront us in the twentieth century more than in the nineteenth is the enormous growth of our large cities and the immense aggregation of millions of people upon a small area, such as we find to be the case in Greater New York, Greater Philadelphia and even Greater Newark. The census returns for 1900, as far as they have been published, disclose a tendency of which I believe the people of this State should take early advantage, namely, the tendency on the part of more intelligent people to leave the large cities and settle in the more healthy and more advantageous portions of the surrounding territory, where, under semi-rural conditions, they can enjoy a degree of happiness and health such as, under the best conditions, is not possible in the crowded centers of population. I believe that this tendency will become more confirmed, will become a more definite phase, during the next quarter of a century, and that it will prove of benefit to the people of this State, who, from both of the large cities of New York and Philadelphia, will draw the best elements of the population, as a new class of suburban residents, in far greater numbers than ever before. But public intelligence has not reached a degree of development very considerably above that which prevailed a quarter of a century, or even a decade, ago. To-day, more than at any time in the past, do people inquire into the health factors of a community and the conditions making for a healthy and a long life, and only in proportion as our cities and country sections hold out inducements in this direction, and make clear, beyond the shadow of a doubt,

that our State is healthy and advantageous from this point of view, will we attract in the very near future the overflow of the intelligent and desirable population of New York and Philadelphia, which will do much to aid us in the more rapid development of this State. I believe I am not going too far when I say that on the basis of my own investigation and my own personal inspection of nearly every part of northern and southern New Jersey I am warranted in the emphatic assertion that this State offers advantages for the health-seeker and the home-seeker such as cannot be found within a hundred miles of any other large city of this country. We have a State offering every variety of natural advantages, the seashore, the mountains, proximity to large forest areas, and even a lake country such as England itself has little more of beauty and attraction to boast of. You cannot extend the practical utility of vital statistics in a more beneficent direction than by giving strong encouragement to the local health officers of our cities and towns and to all our physicians practicing in the different sections of this State in collecting and publishing the actual facts as they pertain to the longevity of the people of this State. Just in proportion as we thus demonstrate the practical value of vital statistics to the people at large shall we gain for our State an increasing degree of public approval, which is so desirable and so fully deserved.

IMPROVEMENTS OF METHODS FOR SECURING RETURNS OF BIRTHS IN NEW JERSEY.

BY A. CLARK HUNT, M.D., METUCHEN.

The development of statistical work has kept pace with the various branches of sanitary science, and the importance of deductions drawn from carefully collected statistics is admitted by all workers in sanitary fields. The effort of the sanitarian is to lessen mortality and to preserve to the State a normal increase of population. It is essential to have primarily an accurate knowledge of the population of any given State, and this is secured by the national census, which collects the data every ten years. In addition to this a census is taken by the State of New Jersey five years after the national census is available.

Having obtained the population of the State, there follows the necessity of gathering the statistics as to the increase by births and the decrease due to deaths. The value of statistics in reference to births depends upon the accuracy of the data collected and the completeness of the returns. Large aggregates are also necessary where safe deductions are sought for. It is generally true that where there is a high birth-rate there is a correspondingly high death-rate, but the period of years over which the high birth-rate continues must be considered. Newsholme states that where there is a high birth-rate continued over a number of years there is often a low death-rate. This at first thought seems fallacious, but when we consider that the continuance of a high birth-rate means, in a few years, an increase of the number of persons living between the ages of five and forty years, it is evident that the low death-rate uniformly present between these ages will more than equalize the high death-rate that is noted in children under five years of age.

It is never safe to consider the relation of the birth-rate in a given district to the death-rate without a knowledge of the constitution of the population and also of the conditions under which the individuals constituting the population lived. We must also bear in mind that no deduction can be drawn from statistics as to births and deaths without the additional light which careful sanitary knowledge of locality and hygienic conditions may throw upon the subject, and without the aid of complete and accurate returns the local or State health officer is unable to accomplish perfect work. Although the complete records of births is needed by the students of statistics, the records have an actual value to the citizens of the State which is often overlooked. The legislative enactment makes certified copies of these certificates evidence in the courts of law, and on an average over two hundred such certificates are issued each year by the Bureau of Vital Statistics. By these certified copies is established the rights of children to estates, pensions, &c., and each year the number of certified copies issued is increasing.

Before examining the relative number of birth certificates returned to the Bureau of Vital Statistics in New Jersey, it is necessary to have some data as to what may be taken as the normal birth-rate for any given locality or State. The birth-rate varies considerably from year to year in localities, but the following

figures enable us to approximate the normal rate. The birth-rate of Europe, exclusive of Russia, from 1865 to 1883, was 35.4 to each one thousand of living population, while in Russia the rate was 49.4. In 1899 the birth-rate for England and Wales was 29.0 per thousand. In our own country, in Connecticut, during the year 1898, the birth-rate was 23.05. In Rhode Island, from 1881-1890, the rate was 20.03, from 1891-1898 it was 26.03, and in 1898, 26.0. In Massachusetts, for twenty years, from 1851-1890, the highest birth-rate recorded in any year was 30.14, while the lowest was 23.87. In thirty-three cities in England and Wales the average birth-rate was 30.07 per thousand, the highest in any given year being 32.5. It is reasonable to suppose that the birth-rate should be in any series of years somewhere between twenty-three and thirty per thousand, and the death-rate from eighteen to twenty-one.

Let us inquire as to the actual birth-rate for a series of years in New Jersey, by counties and cities, comparing this with the death-rate for corresponding periods. The following table shows the population, number of births, birth-rate per thousand, together with the number of deaths and death-rate per thousand, for the years 1880, 1885, and 1889-1900. This covers a period of fourteen years. We would call attention to the conclusive evidence which the figures produce of failure on the part of those charged with making returns of births to comply with the requirements of the law:

I.

<i>Years.</i>	<i>Population.</i>	<i>No. of Births.</i>	<i>Birth-rate per 1,000 Population.</i>	<i>No. of Deaths.</i>	<i>Death-rate per 1,000 Population.</i>
1880,	1,130,892	23,116	20.44	18,967	16.77
1885,	1,278,033	24,077	18.84	23,807	18.63
1889,	1,397,647	29,099	20.82	26,543	18.99
1890,	1,441,017	30,103	20.89	28,530	19.80
1891,	1,478,784	28,882	19.54	28,840	19.50
1892,	1,511,653	30,627	20.27	32,685	21.62
1893,	1,538,799	32,285	20.98	30,596	19.88
1894,	1,578,373	33,662	21.33	30,004	19.09
1895,	1,672,942	31,742	18.97	30,634	18.31
1896,	1,718,543	31,207	18.16	30,767	17.90
1897,	1,764,144	31,595	17.91	29,822	16.90
1898,	1,810,008	32,515	17.96	27,337	15.11
1899,	1,855,872	29,419	15.85	30,999	16.70
1900,	1,883,669	32,270	17.13	31,474	16.62

The highest birth-rate shown was in 1893, when 32,285 births were recorded, and 30,596 deaths, the birth-rate being 20.98, the death-rate 19.88. The lowest birth-rate found in this table is in 1899, the births recorded being 29,419, while the deaths are 30,999, the birth-rate being 15.87, the death-rate 16.70. For the entire fourteen years represented in this table the average birth-rate was 19.22 per thousand of population, while the average death-rate was 18.27.

The tables which follow, numbers 2, 3, 4 and 5, give the same data as table number 1 for the cities of Newark, Trenton, Salem and Rahway:

II.—NEWARK.

<i>Years.</i>	<i>Population.</i>	<i>No. of Births.</i>	<i>Birth-rate per 1,000 Population.</i>	<i>No. of Deaths.</i>	<i>Death-rate per 1,000 Population.</i>
1880,	136,400	3,518	25.79	2,553	18.71
1885,	152,988	3,494	22.84	3,729	24.38
1889,	166,172	4,920	29.61	4,253	25.59
1890,	181,518	4,902	27.01	4,948	27.26
1891,	186,598	4,810	25.78	4,420	23.69
1892,	193,366	4,927	25.48	5,641	29.17
1893,	198,636	5,410	27.24	4,900	24.67
1894,	204,902	5,336	26.04	4,760	22.68
1895,	215,806	4,684	21.70	4,643	21.52
1896,	222,601	4,364	19.60	4,628	20.79
1897,	229,396	4,754	20.73	4,496	19.60
1898,	236,191	5,051	21.39	5,051	16.65
1899,	242,986	4,334	17.84	4,714	19.40
1900,	246,070	5,668	23.04	4,824	19.60

III.—TRENTON.

<i>Years.</i>	<i>Population.</i>	<i>No. of Births.</i>	<i>Birth-rate per 1,000 Population.</i>	<i>No. of Deaths.</i>	<i>Death-rate per 1,000 Population.</i>
1880,	29,910	563	18.82	618	20.66
1885,	34,386	489	14.22	601	17.48
1889,	50,601	988	19.53	756	14.94
1890,	58,488	846	14.46	1,015	17.35
1891,	59,896	667	11.14	929	15.51
1892,	66,686	744	11.16	1,317	19.75
1893,	67,824	669	9.86	1,096	16.16
1894,	69,082	775	11.22	1,067	14.14
1895,	62,518	597	9.55	1,126	18.01
1896,	63,530	645	10.15	1,182	18.60
1897,	64,542	736	11.40	1,060	16.44
1898,	65,554	764	11.66	1,013	15.45
1899,	65,554	679	10.20	1,179	17.71
1900,	73,307	685	9.34	1,204	16.42

IV.—SALEM.

<i>Years.</i>	<i>Population.</i>	<i>No. of Births.</i>	<i>Birth-rate per 1,000 Population.</i>	<i>No. of Deaths.</i>	<i>Death-rate per 1,000 Population.</i>
1880,	5,057	83	16.41	76	15.02
1885,	5,516	122	22.12	106	19.22
1889,	5,884	80	13.60	107	18.18
1890,	5,512	85	15.42	97	17.60
1891,	5,516	95	17.22	93	16.86
1892,	5,516	82	14.87	108	19.58
1893,	5,512	86	15.79	96	17.42
1894,	5,516	93	16.86	113	20.49
1895,	6,337	92	14.52	102	16.09
1896,	6,501	64	9.84	100	16.77
1897,	6,665	82	12.30	111	16.65
1898,	6,829	43	6.30	125	18.30
1899,	6,993	62	8.87	128	18.30
1900,	7,157	62	8.66	117	16.35

V.—RAHWAY.

<i>Years.</i>	<i>Population.</i>	<i>No. of Births.</i>	<i>Birth-rate per 1,000 Population.</i>	<i>No. of Deaths.</i>	<i>Death-rate per 1,000 Population.</i>
1880,	6,454	132	20.45	116	17.97
1885,	6,861	74	10.79	107	15.60
1889,	7,186	125	17.39	138	19.20
1890,	7,090	100	14.10	137	19.32
1891,	7,153	70	9.79	126	17.61
1892,	7,201	111	15.41	166	23.05
1893,	7,165	86	12.00	171	23.87
1894,	7,301	92	12.60	137	18.76
1895,	7,945	77	9.69	144	18.12
1896,	8,113	31	3.82	139	17.13
1897,	8,281	97	11.71	133	16.06
1898,	8,452	58	6.86	121	14.30
1899,	8,523	22	2.58	142	16.67
1900,	8,594	64	7.45	123	14.31

We notice in the examination of these tables that the highest birth-rate for any single year in Newark was 29.61, in 1889, and the lowest was 17.84, in 1899. In Trenton, the maximum rate of 19.53 was reached in 1899, the minimum of 9.34 in 1900. This shows a remarkable falling off, and can only be explained by neglect to make returns. In the city of Salem the highest birth-rate recorded was 24.93, in 1884, the lowest was 6.30, in 1898. The deaths in 1898 were 125 and the births 43. In the city of

Rahway the highest birth-rate recorded was in 1880, the rate being 20.45. The lowest was in 1899, the rate being 2.58, and in 1896 the rate was but 3.82. This city, more than any one of the four, shows failure to return the statistics in accordance with the law. Enough has been shown in these tables to lead to the conclusion that returns of births in New Jersey are incomplete, and therefore unsatisfactory.

What is the law in New Jersey compelling the returns of births? Section 2, chapter 29, laws of 1888, is as follows:

"That it shall be the duty of the physician or midwife present at the birth of any child born in this state, and in case there be no physician or midwife present, then of the parents, or either of them, to transmit, within thirty days after such birth, to the officer hereinafter designated, a certificate of such birth, which certificate shall set forth particularly, as far as they can be obtained, the day of the month and year of the birth, the township, city or municipality, and the county, in which the birth occurred, the name of each of the parents, the maiden name of the mother, the birthplace, residence and occupation of each of the parents, the sex and color of the child, the name of the child, if it be named, and the name of the attending physician or midwife, if any there be; it shall also be the duty of the assessor of every township, and of the clerk or the person acting as registrar of vital statistics in every city, borough, town or other local municipal government, between the first and tenth days of April, in each and every year, to mail to each physician or midwife residing in such township, city, borough, town or other local municipal government, or to supply to every such physician or midwife, on application therefor, twelve envelopes of proper size, each with a two-cent postage stamp thereon, to be provided at the expense of the township, city, borough, town or other local municipal government, for the use of said physicians and midwives in transmitting said certificates of birth to the officer hereinafter designated; any physician, midwife or parent whose duty it may be to transmit such certificate as aforesaid, and who shall neglect or fail to perform such duty within the time above limited, shall be liable to a penalty of twenty dollars; and the assessor of any township who shall ascertain that any physician, midwife or parent has neglected or failed to perform such duty as aforesaid, within the time above limited, shall forthwith make and sign a certificate setting forth the particulars hereinabove specified, and shall mark the same with the words 'special return,' but no such certificate of the assessor and no failure of any assessor, clerk or registrar of vital statistics to mail the envelopes aforesaid shall release any physician or midwife, or any parent, from the duty of certifying such birth in the manner aforesaid, nor from the penalty incurred by any neglect or failure to certify such birth."

The law requires the physician or midwife in attendance to fill out a certificate of birth and forward it to the proper authorities. The experience of a number of years shows that in most instances neglect to make returns can be traced directly to the failure of the physician to comply with the law. If physicians can only be taught to appreciate the fact that the making out of a certificate of

birth is a duty which he owes to his client, and that his neglect so to do may inconvenience persons and possibly deprive children of legal rights, a great improvement would follow. The State gives a license to the physician, which virtually means trade protection, and also relieves him from jury duty. He should be willing, in return for these privileges, to give the State the information in regard to the births and marriages coming under his observation. As regards midwives, it may be said that returns of births by them are more complete than by physicians. To secure returns of births, therefore, educate the physician to his responsibility, entreat and plead with him to a given limit, and finally sue him and collect the penalty for his failure to obey the law.

The registrar of vital statistics is charged under the law with the collection of the certificates, and receives a slight incentive to perform his work in the shape of a small fee. The income is so small in some districts as to be disregarded. It has been suggested that an increase of the amount paid city clerks and assessors might lead to more complete collections of certificates, but it is doubtful whether much can be accomplished in this direction. The placing of the collection of certificates under the supervision of city clerks or assessors is possibly an error in the law which should be modified. The intimate relation which should exist between the local board of health and the registrar of vital statistics is so essential that the appointment should be made by that board, and the person chosen should be qualified for the position and have some interest in the data collected and their bearing on sanitary progress.

The law already gives the local board of health the power of appointment, and, where a separate registrar has been appointed, the results have been satisfactory. In many instances the failure of the city clerk or assessor to collect returns of births can be traced to a lack of support by the local board of health. Whenever the registrar reports that a physician is derelict in reporting births, the local board should at once bring pressure to bear upon the offending party and thus aid the registrar. It happens frequently that the registrar has done everything in his power to compel a physician to make returns, but has been laughed at for his pains. The law has given the local board of health sufficient power, under ordinance, to collect penalties for failure of physi-

cians to make returns of births, and if a local board is once aroused to a knowledge of its power and obligations, there are no obstacles to the enforcement of the law. Where a local board of health has knowledge of the failure of certain physicians to make returns, the names of such persons should be sent to the State Board of Health, and legal action will follow, as a law passed by the Legislature of 1898 permits the State Board of Health to bring action for the penalty.

Another method by which the return of births may be increased is one that has been in operation in Boston for several years. In that city an arrangement is made with the parties collecting data for the city directory by which, when a house is visited, inquiry is made as to the birth of any children during the year. If children have been born in the house, the names of the parents are taken and the facts reported to the city health officer. An inspector of the city board of health is then sent to investigate. This method might be adopted by registrars of vital statistics in the larger cities of the State, but could not be made use of in rural districts unless the persons taking the school census were willing to undertake a similar inquiry.

It might appear from what has been said that heretofore this subject has not received the attention from the State authorities which its importance merits, but anyone who will take the trouble to look over the circulars, &c., of the State Board of Health for all the years past will find that the effort to secure improvement has been tireless. We should not be pessimistic in regard to the future, and the evidence of attention to the collection of statistics by local boards of health is shown in some of our larger cities, and we trust that hearty co-operation of both local and State authorities will soon place our State in the position which it should occupy.

The United States Census Bureau in 1890 placed New Jersey in a list of four other States in the Union from which accurate returns of deaths were available, and we trust that the system may be so perfected that the State may be recognized as leading in all departments which have a direct or indirect relation to the health of its citizens.

MEDICAL INSPECTION OF SCHOOLS.

BY JOHN TAYLOR, M.D., ASBURY PARK.

The board of education of Asbury Park, taking advantage of section 225, School Laws 1900,* appointed a medical inspector. The duties of a medical inspector should be placed under two heads, the first for the detection of communicable diseases, the second for the physical examination of the pupils.

In order that this work may be properly carried out it will be necessary to have a suitable room, to be known as "The Medical Inspector's office." This office should be provided with, in addition to other furniture, a cabinet suitable to retain a card system that may be selected, printed cards for records, adjustable gas or electric light for examining the ears, noses and throats, mirrors of three sizes for nose and throat work, nasal specillum, ear specilla, tape measure, stethoscope, scales, measuring rod, test frame, screens for test frame, test types, worsted to test color sense, wooden tongue depressers, head mirror, set of tuning forks, towels, glass dishes for solution to sterilize nose and ear specilla, and mirrors. In the first division of the work—the detection of communicable diseases—it is necessary for the inspector to visit the schools each day, and should be as early in the day as possible. In order to facilitate matters, the following card has been printed:

* Section 255, School Laws 1900. "Every board of education may employ a competent physician to be known as the medical inspector, fix his salary and define his duties. Said medical inspector shall visit the schools of the district in which he shall be employed at stated times to be determined by the board of education, and during such visits shall examine every pupil referred to him by a teacher. He shall, at least once during each school year, examine every pupil to learn whether any physical defects exist, and keep a record from year to year of the growth and development of such pupil, which record shall be the property of the board of education, and shall be delivered by said medical inspector to his successor in office. Said inspector shall lecture before the teachers at such times as may be designated by the board of education, instructing them concerning the methods employed to detect the first signs of communicable disease and the recognized measures for the promotion of health and prevention of disease. The board of education may appoint more than one medical inspector."

ASBURY PARK PUBLIC SCHOOLS,
Department of Medical Inspection.

Date,
 Name of pupil, Residence, Age,
 Class, Any cases of sickness at home?
 Symptoms noted by teacher, Teacher.

The medical inspector will visit the school buildings each day at ten A. M.
 This card is to be filled out by the teacher when any pupil appears to be ill.
 This card should then be sent to the doctor's desk.
 (Plenty of space, of course, is given for full answers to above questions in this
 and other cards given in this paper.)

These cards have been distributed among the teachers, and if they find any pupil that in any way excites their suspicion, a card is filled out and sent by the pupil to the inspector's office at 10 A. M. The inspector visits the school between 10 and 10:30 A. M., and will find at his office all pupils in which symptoms of illness are suspected by the teacher. These will be disposed of in the following manner:

First, return to the class-room as the teacher's suspicions have not been confirmed; *second*, child returned to class and a note sent home calling attention of the parents to the child's condition, as an urticaria; *third*, child excluded, and note sent home forbidding child to return to school until child presents a certificate from the proper sources, stating that the child has recovered, as a child suffering from measles or scarlet fever.

There has been provided the following form to be used when communicating with parents:

ASBURY PARK PUBLIC SCHOOLS,
Medical Inspection Department.

..... 190
 M.....
 Dear—Symptoms of illness have appeared in the case of
, and you are advised to place the child
 under the care of your family physician.

When the child returns to school a physician's certificate, showing that recovery has occurred, should be furnished.

Very respectfully,

JOHN TAYLOR, M.D.,
Medical Inspector.

If the child is suffering from some communicable disease, the form is used as printed; if not a communicable disease, the last sentence is erased. On the back of the card which the pupil brings there is an explanatory note made stating how the case has been disposed of. These cards are filed in their proper places with records of physical examinations.

For the second division of the work—the physical examination of the scholar—the following form has been printed:

ASBURY PARK PUBLIC SCHOOLS,
Department of Medical Inspection.

No	Date,		
Class,	Name,	Age,	
Weight,	Height,	General condition,	
Chest measurement,	Inspiration,	Expiration,	
Dorsal spine,	Cutaneous diseases,	Heart,	
Lungs,	Throat,	Naso-pharynx,	
Nasal septum,	Teeth,	Eyes—R	L
Ears—R.....	L.....	Color sense,	Date of last successful vaccination,.....

The physical examinations are conducted each afternoon. It has been found that one can examine five pupils an hour by the aid of an assistant to record the results of the examination.

The results of the work, up to date, are as follows: there have been eight sent to the office as suspicious cases. One with an inflamed eye. This case proved to be gonorrhœal ophthalmia. The history of this case is of more than passing interest. Three years ago three children in this family had a severe inflammation of the eyes; two died; for some very mysterious reason a proper diagnosis was never given. A specimen was taken of the discharge from the eye and sent to the laboratory. The report showed gonococci to be present. One case of acute indigestion, one case of acute laryngitis, one case of eczema of the face, one case of blepharitis-marginalis, one case of conjunctivitis and opacities of both corneas, one acute bronchitis, one case intercostal neuralgia.

The Records of the Physical Examinations.—There have been examined, up to date, 236 scholars. Some of the records are not complete, as under eyes and color sense some of the smaller children could not be examined, as they did not know their letters, and,

from what information I can obtain, the average child of five or six is unable to call the colors of the spectrum by name. The dorsal spines have not been examined, owing to objection from the parents to exposing the children necessary for such an examination. This we hope to accomplish in another year, after the work has been sufficiently established.

Ages : Five years, 1 ; six years, 15 ; seven years, 35 ; eight years, 44 ; nine years, 41 ; ten years, 38 ; eleven years, 17 ; twelve years, 16 ; thirteen years, 9 ; fourteen years, 16 ; fifteen years, 4.

General condition : Anæmic, 68 ; well nourished, 139 ; robust, 29.

Dorsal spines : One case Potts' disease of the spine.

Cutaneous diseases : Acne, 2 ; alopecia areata, 1.

Heart : Action regular, 225 ; irregular, intermittent, 7 ; murmurs, 4.

Pulse rate : 70 to 75, 35 ; 75 to 80, 41 ; 80 to 85, 22 ; 85 to 90, 64 ; 90 to 95, 15 ; 95 to 100, 25 ; 100 to 105, 3 ; 105 to 110, 12 ; 110 to 115, 5 ; 115 to 120, 6 ; 120 to 125, 3.

Lungs : Breathing clear and unobstructed, 216 ; obstructed, 12 ; phthisis suspected, 1.

Respirations : 15 to 20 per minute, 86 ; 20 to 25, 130 ; 25 to 30, 17 ; deformed chests, 2.

Throat : Normal, 25 ; enlarged tonsils, 211 ; double uvula, 2 ; bifurcated uvula, 2 ; enlarged thyroid gland, 1.

Naso-pharynx : Normal, 90 ; adenoids, 44 ; not examined, 102.

Nasal septum : Straight, 22 ; normal, 68 ; deflected, 4 ; ecchondrosis, both right and left, 27 ; right, 14 ; left, 46 ; thickened, 53 ; empyema frontal sinus, 1 ; atrophic rhinitis, 3 ; hypertrophy of right inf. turbinate, 2 ; of left inf. turbinate, 3 ; hypertrophic rhinitis, 1.

Teeth : Good condition, 198 ; decayed, 38.

Eyes : Use glasses, 5 ; blepharitis marginalis, 2. Vision : Right eye, 20/20, 164 ; 20/30, 16 ; 20/40, 9 ; 20/50, 3 ; 20/60, 2 ; 20/100, 1 ; 20/200, 3. Left eye, 20/20, 167 ; 20/30, 18 ; 20/40, 8 ; 20/50, 3 ; 20/60, 1 ; 20/200, 1.

Letters not known, 40.

Color sense : Perfect, 184 ; colors not known, 2 ; not examined, 32.

Unable to distinguish between : Blue and green, 7 ; blue and violet, 1 ; red and violet, 2 ; pink and violet, 1 ; violet, blue and green, 2 ; violet, red and blue, 1 ; violet, blue, green and pink, 2 ; violet, blue, pink and red, 1 ; violet, pink, yellow and red, 1 ; violet, blue, green, orange and pink, 1 ; blue, green, pink and yellow, 1.

Ears : Normal, 101 ; drums retracted, 103 ; inspissate cerumen, 38 ; supernumerary appendage of tragus, 1 ; perforated drums, 2 ; chronic sup. ot. med., 2.

Vaccinations : Never vaccinated, 102 ; vaccinated, but date not known, 24 ; vaccinated 1895 or before, 43 ; 1896, 6 ; 1897, 15 ; 1898, 13 ; 1899, 33.

Handed : Use right hand, 226 ; use left hand, 9 ; use both hands equally well, 1.

The law regulating the practice of medicine in this State is clearly intended to prevent any person who styles himself an oculist or eye specialist, but who possesses no license from the State Board of Medical Examiners, from giving advice regarding the

eyes and attempting to correct any error in refraction by the use of glasses. In children in which an error of refraction has been detected by the medical inspector, and a note sent to the parents calling their attention to the child's eyes, the parents, believing the advertisements of these charlatans, seek their advice, and, as a result, the children are, in some instances, in a worse condition than before. The same remarks should be applied to osteopaths, Christian scientists and faith curists. This condition is quite unique. No one, individually, is anxious to secure the necessary evidence and bring it before the courts, and the law does not designate anyone to secure evidence to convict these persons of violating the law and rid the community of these dangerous classes, but, when evidence is presented, the county prosecutor is required to bring the offender before the court. This society, the State Medical Society or county medical societies, should appoint committees to secure evidence and place it in the hands of the prosecutor so as to prevent incompetent and unauthorized persons from practicing any one or all branches of medicine. This work has not been carried on without some objections and obstacles to be overcome. The objections can be attributed to two causes—*first*, they come from a class of people that object, on general principles, to this work or any other that is being done; *second*, from a class that has been misinformed; but these persons have been invited to be present at the school building and see the work. After the work has been explained, and they have seen it, they become its best supporters and appreciate its value.

Following is the program of the twenty-seventh annual meeting of the association, which will be held in the Laurel House, Lakewood, December 6th and 7th, 1901.

FIRST SESSION.

Friday, December 6th, 1901, 3:30 P. M.

1. Announcements.
2. Reports of Committees.
3. Round Table: Subject, The Legal and Sanitary Status of Garbage Disposal in New Jersey.
 - a. The Legal Status. Edwin B. Goodell, Esq., Attorney of the Board of Health, Montclair.
 - b. The Sanitary Status. M. N. Baker, Upper Montclair.Discussion opened by Henry Mitchell, M.D., Secretary State Board of Health.

EVENING SESSION.

Friday, December 6th, at 8 P. M.

4. Prayer. Rev. R. H. McClellan, Lakewood.
5. President's Address. Public Water-Supply in New Jersey. Herbert B. Baldwin, President of the Association, Newark.
6. The Sanitary Aspect of the Reclamation of Meadow Lands. Professor Olin H. Landreth, Union College, New York.
7. Compulsory School Attendance in its Relation to the Public Health. Professor A. B. Poland, Superintendent Public Schools, Newark.

THIRD SESSION.

Saturday, December 7th, 9 A. M.

8. Progress in Veterinary Medicine in its Relation to Hygiene. Dr. William Herbert Lowe, President Veterinary Association of Paterson.
9. Round Table: Subject, Small-Pox. Conducted by John L. Leal, M.D., Paterson.
 - (1) Diagnosis. Dr. E. E. Worl, Newark.
 - (2) Vaccination. Dr. William K. Newton, Paterson.
 - (3) Isolation. Dr. Frank Agnew, Paterson.
 - (4) Disinfection. Mr. M. O. Leighton, Montclair.
 - (5) Local Routine. Mr. D. D. Chandler, Newark.
 - (6) State Routine. Dr. A. C. Hunt, State Board of Health.
10. Miscellaneous Business.
11. Report of Chairman Executive Council.
12. Election of Officers.
13. Adjournment.

OFFICERS, 1901.

President, Herbert B. Baldwin, Newark; First Vice President, H. Brewster Willis, New Brunswick; Second Vice President, John L. Leal, M.D., Paterson; Third Vice President, M. N. Baker, C.E., Upper Montclair; Secretary, James A. Exton, M.D., Arlington; Treasurer, George P. Olcott, C.E., East Orange; Chairman Executive Council, Norton L. Wilson, M.D., Elizabeth.

EXECUTIVE COMMITTEE.

[With above Officers.]

Henry C. Greene, Esq., Arlington; H. R. Baldwin, M.D., LL.D., New Brunswick; Henry B. Francis, Sanitary Inspector, Camden; D. E. English, M.D., Millburn; William J. Harrison, Esq., Lakewood; M. O. Leighton, Sanitary Inspector, Montclair; W. H. Shipps, M.D., Bordentown; Henry S. Scull, Esq., Atlantic City; Elias J. Marsh, M.D., Paterson; Professor Geo. W. Rockefeller, Plainfield; T. Frank Appelby, Esq., Asbury Park; M. R. Sherrerd, C.E., Newark; A. Clark Hunt, M.D., Metuchen; R. H. Parsons, M.D., Mount Holly.

Honorary Members of Council.—Ex-Presidents C. F. Brackett, M.D., LL.D.; Professor Albert R. Leeds, Ph.D.; Professor J. M. Green, Ph. D.; W. K. Newton, M.D.; Henry Mitchell, M.D.; D. Benjamin, M.D.; Geo. P. Olcott, C.E.; E. L. B. Godfrey, M.D.; C. Phillips Bassett, C.E.; Professor Addison B. Poland, Ph.D.; David C. English, M.D.; Shippen Wallace, Ph.D.; James Owen, C.E.; Vernon L. Davey, Ph.D.; Daniel Strock, M.D.

COMMITTEES.

Publication Committee.—David C. English, M.D., Chairman, New Brunswick; Henry Mitchell, M.D., Asbury Park; James A. Exton, M.D., Arlington.

Committee on Uniform Sanitary and Vital Statistics.—M. N. Baker, C.E., Chairman, Upper Montclair; Henry Mitchell, M.D., Asbury Park; E. J. Marsh, M.D., Paterson.

Committee on Legislation.—H. Brewster Willis, Chairman, New Brunswick; James Owen, C.E., Montclair; George B. Olcott, C.E., East Orange; H. S. Scull, Atlantic City; James F. Connelly, Newark.

Digest of Legal Decisions.

COMPILED BY MR. TAYLOR, ESQ.

POWERS OF BOARDS OF HEALTH.—1886.

The powers conferred by the Legislature upon boards of health of this State are to be employed to restrain and suppress public nuisances, not to legalize their creation or continuance. Their methods are designed to be auxiliary to the ordinary modes of public protection. *Garrett v. State*, 20 Vr. 94, 683.

ANIMALS—INFECTIOUS DISEASES—COMMON NUISANCES.—1888.

The "Supplement to an act entitled 'An act to establish a State Board of Health,' approved March 9th, 1877," which supplement was approved March 12th, 1880 (*Pamph. L.*, p. 322), makes animals with contagious or infectious diseases common nuisances, and authorizes their destruction by certain officials under certain conditions. The "Supplement to an act entitled 'An act to prevent the spread of glanders in horses,' approved March 31st, 1864," which supplement was approved March 12th, 1884 (*Rev. Sup.*, p. 8), makes horses affected by glanders common nuisances, and authorizes their destruction by certain officers. *Held*, (1) these acts, so far as they relate to glanders in horses, are within the police powers of the State; (2) they are not within the prohibition of the fourteenth amendment to the federal constitution, because, although they authorize the abatement of such nuisances in advance of a judicial adjudication of the fact of nuisance, yet they do not make the determination of the officials as to that fact conclusive, and only permit their acts, in abating the nuisance, to be justified by proof of the actual existence of such nuisance; (3) the conditions under which such officials may act, under the act of 1880, are mere limitations of their power for the benefit of the

property-owner, and their adjudication that such conditions exist will not protect them unless the existence of the common nuisance is shown. *Newark, &c., Horse Railway Co. v. Hunt*, 21 Vr. 308.

COUNTY BOARDS OF HEALTH—ABATEMENT OF NUISANCES.—1890.

The ninth section of the "Act concerning county boards established for the protection of the public health and the registration of vital facts and statistics in counties of this state" (*Rev. Sup.*, p. 344), was not intended to clothe county boards of health with the functions of the attorney general in cases of public nuisance, but to authorize them to secure for individuals that protection which equity would afford to those persons upon their own suit. *Board of Health, &c., v. New York Horse Manure Co.*, 2 Dick. 1.

IMPLIED POWERS OF BOARDS OF HEALTH.—1892.

The board of health of the city of Newark passed a resolution granting a permit to the Newark Sanitary and Manufacturing Company to carry on the business of night scavengering, and designating certain lands of the sanitary company within the city limits as the place for the deposit, and final disposition by manufacture, of the night-soil. The prosecutors attack the legality of this resolution upon the ground that it will injure them specially by causing a diminution of the value of their real estate. *Held*, (1) that the prosecutors were not injured by so much of said resolution as concerned the permit for night scavengering; (2) that under the act establishing boards of health (*Pamph. L.* 1887, p. 80), the regulations required to be passed by ordinance were such as prescribed general rules with respect to the several matters entrusted to these boards, and that a particular permit authorizing the doing of that which had already been authorized by ordinance might be granted by simple resolution; (3) that the power to designate a place for the deposit of night soil, although not given to boards of health in express terms, is necessarily incident to the general jurisdiction of such bodies over cesspools and the removal of their contents; (4) where a court of law is asked to annul the otherwise lawful action of a municipal body upon

the ground that a nuisance is thereby created, a mere apprehension by prosecutors of such a result injurious to their property will not entitle them to any remedy. *Quære*. As to the right of a prosecutor to attack municipal action upon the ground that it will diminish the salable value of his wife's real estate. *Courter v. Newark*, 25 *Vr.* 325.

NUISANCE.—1894.

The board of health in the township in which a nuisance exists or is carried on has authority, and it is its duty, to abate such nuisance, either on its own motion or by the aid of the court, though it is only hazardous to the health of individuals residing in another township. *Board of Health v. Lederer*, 7 *Dick.* 675.

LIMITS OF JURISDICTION OF BOARDS OF HEALTH.—1895.

The authority conferred by the twenty-eighth and twenty-ninth sections of the act of March 31st, 1887 (*Pamph. L.* 1887, p. 80), upon local boards of health to maintain actions in this court to enjoin nuisances, is confined to nuisances arising and maintained within the territorial limits of the complaining board. For nuisances arising and maintained outside such territorial limits the remedy is by the action of the State Board of Health, under the act of May 24th, 1894. (*Pamph. L.* 1894, p. 495.) *Board of Health v. East Orange*, 8 *Dick.* 498.

BOARD OF HEALTH—POWERS—NUISANCE.—1898.

(1) Under the provisions of the acts of February 22d, 1888, and March 29th, 1892, the board of health of Asbury Park has no power to restrict the owners of a stable to the mode of laying a stable floor prescribed by an ordinance of the board. The owners have the alternative of resorting to any other method which will secure the sanitary condition of the stable, but by departing from the prescribed method they take the risk of creating a nuisance;
(2) If the stable is a nuisance the owners must be prosecuted

Leonard Kalisch, for the prosecutors.

McCarter & Adams, for the defendant.

FORT, J. The complaint in this case charges that the defendants "did contract a plumbing and drainage system, or a portion thereof, of the building situated at the corner of Ridgewood avenue and Baldwin street, on the north side, in the said borough of Glen Ridge, without their having first filed with the secretary of said board of health a plan thereof, signed by the owner, showing the said plumbing and drainage system entire, and without the approval of the said board of health having first been secured therefor." The ordinance in question reads as follows: "Sec. 76. Before any portion of the plumbing and drainage system of any building shall be constructed there shall be filed with the secretary of the board of health a plan thereof, signed by the owner, showing the said plumbing and drainage system entire, from its connection with the sewer, cess-pool or vault, throughout the entire building, together with the location of all fixtures, traps, ventilating pipes, &c. Said plan must be approved and the name of the plumber attached thereto before any portion of the work shall be executed," &c. The complaint seems to charge two offences: (1) Constructing the work "without their first having filed with the secretary of the board of health a plan thereof, signed by the owner;" (2) Because they constructed the work "without the approval of the board of health being first secured therefor."

The conviction sent up is: "Defendants were, by Arthur Darlington, a justice of the peace of the county of Essex, convicted of violating section 76 of the sanitary and plumbing code of the board of health of the borough of Glen Ridge, N. J., * * * wherefore the said justice of the peace doth give judgment that the plaintiff recover of the defendant fifty dollars penalty and four dollars and one cent costs of this proceeding." There is no conviction in the record of any offence with which the defendants are charged. They cannot be "convicted of violating section 76 of the sanitary and plumbing code of the board of health." That section makes some act, or the failure to do some act, an offence. The defendants were tried upon the charges in the complaint, and the conviction must be guilty of some of the offences charged.

O'Shaughnessy v. McLorinan, 43 N. J. L. 410; *Salter v. City of Bayonne*, 59 N. J. L. 128; 36 *Atl. Rep.* 667. Nor is it clear that the proper construction of this ordinance makes the plumber liable for the penalty imposed for the failure to comply with the requirements of section 76 of the borough ordinance. We think that there is no penalty imposed upon the plumber for the failure to file with the secretary of the board "a plan thereof, signed by the owner, showing the said plumbing and drainage system entire." The ordinance does not say that the plumber must do that. It does say that such plan shall be filed, "signed by the owner," and if the duty to file is cast upon anyone it would seem to be upon the owner. A plumber will not be held to this duty by implication. Penal ordinances are construed strictly and will not be held to create a liability where the words are not clear in fixing it. Nor do we think that the provision of the ordinance which says "said plan must be approved, and the name of the plumber attached thereto, before any portion of the work shall be executed" makes it clear that the plumber must get such approval. A proper construction seems otherwise. The plumber does not have to sign. Is it not clear that this ordinance places a duty upon the owner to file a signed plan of his work, and to attach thereto the name of the plumber who is to do it, and to then obtain the approval of the board of health thereto, with all this information before it? It is not necessary for the owner to do this in person: His architect, or even his plumber, may no doubt do it, but for a failure to do it he alone, as we construe this ordinance, is liable. It is his building, and his work that is to be done, and with the construction of his building that the board of health has concern. If it is desired to hold plumbers liable the ordinance must say so specifically.

The conviction will be set aside.

Circulars and Laws.

Many of the circulars which have been issued from time to time by the New Jersey State Board of Health are now out of print, and others have been replaced by revised editions. Following is a list of those which are at present ready for distribution:

- No. 7.—Protection to Bathers.
- “ 79.—Laws Concerning Marriage.
- “ 83.—Tuberculosis.
- “ 89.—Bulletins Nos. 3 and 4 —(Reprint.)
- “ 90.—Ice.
- “ 94.—Contagious Diseases of Animals.
- “ 96.—Public Health Laws, 1899.
- “ 97.—Illuminating Oils
- “ 98.—Restriction of the Spread of Communicable Diseases.
- “ 99.—Maritime Quarantine.
- “ 100.—Transportation of the Dead.
- “ 101.—Births, Marriages and Deaths.
- “ 102.—Small-pox.
- “ 103.—Foods and drugs.

NEW CIRCULARS.

New circulars have been issued as follows: No. 101, Births, Marriages and Deaths; No. 102, Small-pox; No. 103, Foods and Drugs.

CIRCULAR 101, MAY, 1901.

Births, Marriages and Deaths.

SYNOPSIS OF THE LAW RELATING TO THE CERTIFICATION AND REGISTRATION OF BIRTHS, MARRIAGES AND DEATHS IN NEW JERSEY. (CHAPTER 39, LAWS OF 1888.)

Duties of Clergymen and Others.—All persons who perform the marriage ceremony shall, within thirty days, transmit a certificate of the marriage to the local registrar of vital statistics, if

there be such officer, and if there be no such officer, then to the assessor in townships and to the city clerk in cities. (*Sections 1, 4.*)

Duties of Physicians and Midwives.—The physician or midwife who is present at the birth of any child shall transmit, within thirty days, a certificate of birth to the officer mentioned in the preceding section. (*Section 2.*)

Duties of Parents.—When no physician or midwife is present at a birth, then the parents shall transmit the certificate of birth to the proper officer. (*Section 2.*)

The assessor, city clerk or other person acting as registrar of vital statistics shall supply physicians with twelve stamped envelopes annually. (*Section 2.*)

Assessors in townships shall make “special returns” of births in cases where any physician, midwife or parent has failed to perform this duty. (*Section 2.*)

When any person shall die within the State, the attending physician shall sign a certificate of death and deliver it to the undertaker or family. (*Section 3.*)

If no physician shall have attended the deceased person, any physician may view the body and issue a certificate. (*Section 3.*)

Any coroner or other officer who shall lawfully conduct an investigation into the cause of death shall furnish the certificate of death. (*Section 3.*)

When any death occurs within any city or other municipality the registrar of vital statistics, if there be such officer, and if there be no such officer, then the city clerk, after having received the certificate of death, shall issue a permit for burial, and no body of any person dying in any city or other municipality shall be buried until said permit has been issued. (*Section 5.*)

When the death occurs in any township and the burial is to be made anywhere in the State outside of municipal limits, the certificate of death is itself a permit for burial. (*Section 5.*)

When the death occurs in any township and the burial is to be made within any city or other municipality, the certificate of death is to be delivered (see next paragraph) to the assessor of the township, or if the assessor cannot be found, to the clerk of the township, and the said assessor or clerk shall then issue the permit for burial. (*Section 5.*)

It is provided, however, that when a death shall occur in any township and the burial is to be made within any city or other municipality, the certificate of death may be delivered, if more convenient, to the registrar of vital statistics, if there be such officer, and if there be no such officer, then to the clerk of the city or other municipality within which the burial is to be made. (*Section 5.*)

When, for convenience (see preceding paragraph), the certificate of death is delivered to the registrar or clerk of a municipality, the undertaker shall make known to the said officer the name and post-office address of the assessor of the township in which the death occurred, and shall also pay the sum of two cents for postage, and said officer shall issue the burial permit and transmit the certificate of death to the said assessor. (*Section 5.*)

Any Judge of the Court of Common Pleas, or any justice of the peace of the county, may issue a burial permit in case the registrar or clerk of any city or other municipality is absent. (*Section 6.*)

When any dead body shall be brought into this State for burial, it shall be accompanied by a certificate of death, or, in lieu thereof (see also chapter 156 of the laws of 1900), a certificate of death may be obtained from a physician residing in the district within which the burial is to be made. (*Section 7.*)

When a dead body is to be removed from this State (see also chapter 156 of the laws of 1900), the undertaker shall obtain a transit permit from the proper officer. (*Section 8.*)

A record of interments in cemeteries owned by cemetery companies shall be kept by the person in charge of every such cemetery. (*Section 9.*)

Undertakers shall transmit certificates of death within five days after burial, to the assessor of the township in which the death occurred, in all cases in which the said certificate has been used as a permit for burial. (*Section 10.*)

No dead body shall be buried until a lawful permit for burial shall first have been obtained, nor shall any such permit be unlawfully signed or delivered by any clerk, under a penalty of \$50. (*Section 10.*)

Any person making a false certificate of marriage, birth or death shall be punished by a penalty of \$100, or by imprisonment. (*Section 11.*)

All certificates of marriages, births and deaths, and all "special returns" shall be transmitted by assessors, clerks and registrars to the bureau of vital statistics, Trenton, on or before the 15th of every month. (*Section 12.*)

The Medical Superintendent shall certify the number of certificates received from each assessor, clerk and registrar, and for every certificate so certified the local disbursing officer shall pay the sum of ten cents to the said assessor, clerk or registrar. (*Section 12.*)

In cities containing thirty thousand inhabitants or over, the governing body may cause a local record of vital statistics to be made. (*Section 12.*)

An alphabetical index shall be made of all certificates of marriages, births and deaths received by the State bureau of vital statistics. (*Section 13.*)

Blank forms of certificates shall be furnished by the bureau of vital statistics to local registrars of vital statistics, assessors and city clerks, and by these officers said blanks shall be distributed to clergymen, physicians, midwives and other persons required to perform duties under the law. (*Section 14.*)

A list of ministers, magistrates, physicians, midwives and undertakers shall be kept by assessors, clerks and registrars, and on or about May 1st in each year the said assessors, clerks and local registrars shall send each such person instructions and explanations, prepared and supplied by the bureau of vital statistics, together with a supply of blank forms for certificates of marriages, births and deaths. (*Section 14.*)

The provisions of the act are to be enforced by local boards of health, or by the State board of health, the penalty for violation, except as above set forth, being \$20. (*Section 15.*)

CHAPTER XXXIX., LAWS OF 1888.

AN ACT to secure in this state the certification of marriages, births and deaths, and of the vital facts relating thereto, and to provide for the record thereof.

1. That it shall be the duty of every judge of any court of common pleas, justice of the peace, recorder, police justice, mayor, minister of the gospel, and other person who shall, under the authority of any law of this state, solemnize any marriage therein, and the clerk or keeper of the minutes of any religious society before which any marriage shall be solemnized in this state, to transmit to the officer hereinafter designated, within thirty days after such solemnization, a certificate of each and every marriage solemnized by any such minister, magistrate or other person, or before any such religious society, which certificate shall set forth particularly the name, age, parentage, birthplace, occupation and residence of each of the persons married, the time and place of the marriage, the condition of each of the persons married, whether single or widowed, the name of the minister, magistrate or person by whom, or of the religious society before which the marriage was solemnized, and the names and residences of the witnesses; any minister, magistrate or other person, or clerk or keeper of the minutes of any religious society, who shall neglect or fail to transmit such certificate to the officer hereinafter designated, within the time aforesaid, shall be liable to a penalty of twenty dollars.

2. That it shall be the duty of the physician or midwife present at the birth of any child born in this state, and in case there be no physician or midwife present, then of the parents or either of them, to transmit, within thirty days after such birth, to the officer hereinafter designated, a certificate of such birth, which certificate shall set forth particularly, as far as they can be obtained, the day of the month and year of the birth, the township, city or municipality, and the county, in which the birth occurred, the name of each of the parents, the maiden name of the mother, the birthplace, residence and occupation of each of the parents, the sex and color of the child, the name of the child, if it be named, and the

name of the attending physician or midwife, if any there be; it shall also be the duty of the assessor of every township, and of the clerk or the person acting as registrar of vital statistics in every city, borough, town or other local municipal government, between the first and tenth days of April, in each and every year, to mail to each physician or midwife residing in such township, city, borough, town or other local municipal government, or to supply to every such physician or midwife, on application therefor, twelve envelopes of proper size, each with a two-cent postage stamp thereon, to be provided at the expense of the township, city, borough, town or other local municipal government, for the use of said physicians and midwives in transmitting said certificates of birth to the officer hereinafter designated; any physician, midwife or parent whose duty it may be to transmit such certificate as aforesaid, and who shall neglect or fail to perform such duty within the time above limited, shall be liable to a penalty of twenty dollars; and the assessor of any township who shall ascertain that any physician, midwife or parent has neglected or failed to perform such duty as aforesaid, within the time above limited, shall forthwith make and sign a certificate setting forth the particulars hereinabove specified, and shall mark the same with the words "special return," but no such certificate of the assessor and no failure of any assessor, clerk or registrar of vital statistics to mail the envelopes aforesaid shall release any physician or midwife, or any parent, from the duty of certifying such birth in the manner aforesaid nor from the penalty incurred by any neglect or failure to certify such birth.

3. That when any person shall die within this state, it shall be the duty of the physician who shall have attended such person during his or her last sickness to furnish to the undertaker, or any member of the family applying therefor, a certificate of such death, which certificate shall set forth particularly, to the best of such physician's knowledge, the name, age, sex, color, nativity, occupation, last place of residence, the township, city or municipality and the county within which the death occurred, and the cause of death; if no physician shall have attended such deceased person during his or her last sickness, or if the physician who shall have attended such deceased person shall be absent or sick, so that no certificate of death can be obtained from him in time for burial, then, and in either of such cases, it shall be lawful for any physi-

cian to whom application may be made, after having viewed and examined the dead body, and being satisfied that the deceased person did not come to his or her death by the contrivance, aiding procuring or other misconduct of any person or persons, to furnish such certificate as aforesaid; in case the attending physician, or the physician applied to as aforesaid, after having consented to act upon such application and viewed and examined the dead body, shall refuse to furnish such certificate as aforesaid, except upon the ground aforesaid, he shall be liable to a penalty of twenty dollars; and if any physician shall refuse to furnish such certificate as aforesaid, upon the ground aforesaid, the same proceedings shall be had as are provided by law for the investigation of the cause of violent, sudden or casual deaths, and the physician or officer who shall conduct such investigation shall furnish such certificate of death as aforesaid.

4. That every certificate of marriage or birth required to be made by the first and second sections of this act shall, in any city, borough, town or other local municipal government, be transmitted to the registrar of vital statistics, if there be such officer, and if not, then to the clerk of the city, borough, town or other municipal government in which such marriage or birth shall occur; and in any township every such certificate shall be transmitted to the assessor of the township in which such marriage or birth shall occur, or if there be no assessor in office, then to the township clerk.

5. That every certificate of death required to be made by the third section of this act, shall, where the death occurs within any city, borough, town or other local municipal government, be delivered to the registrar of vital statistics of such city, borough, town or other local municipal government, if there be such officer, and if there be no such officer, then to the clerk thereof, and said registrar or clerk shall thereupon issue a permit for the burial of the body of the deceased person described in said certificate of death, and shall forthwith give said permit to the person delivering to him the certificate of death, which permit shall be authority for the burial of such body, but the said certificate of death shall be retained, to be disposed of as hereinafter directed; where the death occurs within any township and the burial is to be made in any place in this state not within the limits of any city, borough, town or other municipal government, every certificate of such death which shall be furnished to the undertaker, or other person:

acting as undertaker, shall of itself constitute a sufficient authority for such burial; and where the death occurs within any township and the burial is to be made within the limits of any city, borough, town or other local municipal government of this state, every certificate of such death shall be delivered to the assessor of such township, if there be one in office, or if there be no assessor in office, then to the clerk of such township, which assessor or clerk shall thereupon issue a permit for the burial of the body of the deceased person described in such certificate of death, shall give said permit to the person delivering to him the certificate of death, and shall retain the certificate of death, to be disposed of as hereinafter directed; *provided, however*, that when a death shall occur within any city, borough, town or other local municipal government now existing, or which shall hereafter exist, within the limits of any township, then, and in such case, a permit for burial shall be obtained in the same manner as in other cities, boroughs, towns and local municipal governments; *and provided further*, that when a death shall occur within any township and the burial is to be made within the limits of any city, borough, town or other local municipal government of this state, the certificate of any such death may be delivered, if it be more convenient, by the undertaker, or person acting as undertaker, to the registrar of vital statistics, if there be such officer, or if there be no such officer, then to the clerk of the city, borough, town or other local municipal government within which such undertaker, or person acting as undertaker, may reside, or within which the burial is to be made, but in all such cases it shall be the duty of such undertaker, or person acting as undertaker, to deliver with said certificate of death, in writing, to such registrar or clerk, the name and post-office address of the assessor, if there be such officer, and if there be none, then of the clerk of the township in which the death shall have occurred, and also the sum of two cents to pay for postage, and said registrar or clerk shall immediately issue a permit for burial as in other cases, and shall immediately transmit such certificate by mail to the assessor or clerk, whose name and post-office address shall have been furnished as aforesaid, and for any neglect or failure so to transmit such certificate, such registrar or clerk shall be liable to a penalty of twenty dollars.

6. That in case where, on account of the absence of the registrar of vital statistics or the clerk of any city, borough, town or

other local municipal government, or for any other sufficient reason, it may be impossible to obtain from such registrar or clerk a permit in time for burial, it shall be lawful for any judge of the court of common pleas or any justice of the peace of the county in which the death occurred, on presentation of the certificate of death to him, and being satisfied that such certificate is genuine, and that no permit can be obtained in time for burial from the clerk aforesaid, to issue a special permit for burial in the following form: "It being impossible to obtain a burial permit from the registrar of vital statistics or the clerk of the [stating here the name of the city, borough, town or other local municipal government], on account of [state here the reason], I, a judge of the court of common pleas [or a justice of the peace] of the county of ———, do hereby grant this special permit for the burial of ———, whose death has been duly certified to me," which permit shall be dated and signed by such judge or justice; the said judge or justice shall transcribe a copy of said permit upon the back of the certificate of death, shall give the original permit to the person delivering to him the certificate of death, and shall transmit the certificate, with the transcription thereon indorsed, by mail, in an envelope marked "burial permit," to the state bureau of vital statistics, at Trenton; the judge or justice who shall issue any such permit shall be entitled to charge and receive from the person presenting to him such certificate of death the sum of fifteen cents.

7. That in case any person shall die without this state, and his or her body shall be brought into this state for burial, it shall be the duty of the family undertaker or other person conveying such body into this state, to bring therewith, or send beforehand, a certificate of death made by the physician who attended such deceased person during his or her last sickness, setting forth the particulars specified in the third section of this act, or in lieu thereof, a certificate of death, setting forth said particulars, may be obtained from any physician duly authorized to practice medicine within this state, who shall reside within the township, city, borough, town or other local municipal government within which the burial is to be made, and who shall have made proper inquiry as to the facts required to be certified and satisfied himself as to the same; if the burial of such body shall be made in any township of this state, such certificate as aforesaid shall constitute a sufficient permit for burial; but if the burial shall be made in any

city, borough, town or other local municipal government of this state, the said certificate shall be delivered to the registrar or clerk thereof, who shall issue a permit for burial, as in cases where deaths shall occur within the city, borough, town or other local municipal government of which such registrar or clerk is an officer.

8. That any undertaker or other person who shall be about to remove from this state the body of any deceased person who shall have died within this state, shall, prior to such removal, obtain a certificate of the death of such person, as required by the third section of this act, and such certificate shall be presented to the assessor of the township in which the death shall have occurred, if there be such officer, or if there be none, then to the clerk thereof, or to the registrar of vital statistics of the city, borough, town or other local municipal government, in which the death shall have occurred, or if there be no such officer, then to the clerk thereof, who shall issue to the person presenting such certificate a general or transit permit, according as the case may require; or, if the death shall have occurred in any township, and it shall be more convenient to present said certificate of death to the clerk of some city, borough, town or other municipal government, such course may be adopted, but the person presenting such certificate shall, in such case, also furnish said clerk with the name and post-office address of the assessor, if there be such officer, and if there be none, then of the clerk of the township in which the death shall have occurred, and shall also pay to said clerk the sum of two cents, and said clerk shall thereupon issue a general or transit permit as aforesaid, and shall also forthwith transmit said certificate, by mail, to the assessor or clerk, whose name and post-office address shall have been furnished as aforesaid, and for any neglect or failure so to transmit such certificate, said clerk shall be liable to a penalty of twenty dollars.

9. That it shall be the duty of the keeper of every cemetery within this state, owned by any cemetery company under any law of this state, to keep a record of all interments made in such cemetery, which record shall include the name of the person interred, last place of residence and the name of the undertaker, or person acting as undertaker; said record shall be a public record and at all times open to the inspection of any persons who, under any of the laws of this state, shall have duties imposed upon them relating to the procurement or tabulation of vital statistics.

10. That it shall be the duty of every undertaker in this state, and of every person acting as undertaker in this state, to transmit by mail or otherwise to the assessor of the township, or, if there be no assessor, then to the clerk of the township, within five days after burial, the certificate of death which he may have received and used as a burial permit in the case of any person who shall have died in such township, or of any person who shall have died out of this state and been buried in such township, and if he shall neglect or fail so to do he shall be liable to a penalty of twenty dollars; and any undertaker, or person acting as undertaker, who shall bury within this state the body of any deceased person without having first received a permit for burial, according to the true intent and meaning of this act, and any clerk who shall sign any permit for burial and deliver the same, or knowingly suffer it to be delivered, to any undertaker or other person, without having first received a certificate of death, according to the true intent and meaning of this act, shall be liable to a penalty of fifty dollars.

11. That any minister of the gospel, magistrate, physician, midwife or other person, who shall knowingly make any false certificate of marriage, birth or death, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be liable to a fine not exceeding one hundred dollars or imprisonment in the county jail for a period not exceeding three months, or both, at the discretion of the court.

12. [As amended.] That it shall be the duty of the assessor and clerk of every township, and of the registrar of vital statistics and the clerk of every city, borough, town, and of the clerk of every county board of health and vital statistics, or other local municipal government in this state, on or before the fifteenth day of each calendar month, to transmit by mail to the state bureau of vital statistics at Trenton, in an envelope marked "vital statistics," all the certificates of marriages, births and deaths received by such officer, and of all "special returns" of births made during the preceding month, which certificates and returns it shall be the duty of every such officer to receive for such transmission; and every such assessor, registrar or clerk, upon receiving a certificate from the medical superintendent of said bureau of the whole number of certificates of marriages, births and deaths returned as aforesaid, shall be entitled to receive from the proper disbursing officer of the township, city, borough, town, county or other local munici-

pal government in which such assessor, registrar or clerk shall be an officer, the sum of ten cents for each marriage, birth and death so returned, the receipt for which shall be attached to the said certificate of the said medical superintendent, and no payment shall be made unless such certificate be produced; and it shall further be the duty of the registrar of vital statistics, or the clerk of every city containing thirty thousand inhabitants or over, provided he has been or shall be so directed by the common council or other governing body thereof, before transmitting said certificates to the state bureau of vital statistics, to make a complete record of the marriages, births and deaths occurring in such city, which record shall be a transcript of the names and vital facts appearing upon the certificates of marriages, births and deaths delivered to him as hereinbefore directed; the said record shall be so made up that the marriages, the births and the deaths shall appear in separate and distinct classes, in books of such form as may be approved by the local board of health, and for making such record the said registrar or clerk shall be entitled to receive from the disbursing officer of said city the sum of three cents for each certificate thus recorded in addition to his other fees and salary.

13. That it shall be the duty of the medical superintendent of said bureau to cause the certificates of marriages, births and deaths received by said bureau pursuant to the provisions of this act, to be alphabetically indexed, and in connection with said index to cause to be transcribed or otherwise recorded from said certificates such of the vital facts appearing thereon as the state bureau of vital statistics may deem necessary and useful; the index to the certificates of marriages, of births and of deaths, with said record of vital facts, shall be kept separate and distinct from one another, and shall further be so arranged as to present in separate and distinct classes the index and record for each county, and for each city, borough, town and other local municipal government containing five thousand inhabitants or over, which index and record thus prepared and classified shall be preserved as a public record in the office of the state bureau of vital statistics, and the original certificates shall be preserved in the archives of the bureau of vital statistics; any such original certificate, or any copy thereof, certified to be a true copy under the hand of said medical superintendent, shall be received in evidence in any court of this state to prove the facts therein contained.

14. That it shall be the duty of the state bureau of vital statistics to cause to be prepared blank forms of certificates of marriages, births and deaths, and of burial permits, corresponding to the requirements of this act, which forms, together with such sections of this law and such instructions and explanations thereof as the said bureau may deem useful to persons having duties to perform under this act, shall be printed and supplied in the same manner as the blanks and stationery for the use of the several departments and public offices of the state government are printed and supplied, and shall be distributed from time to time, as occasion shall require, by said bureau, amongst the assessors of the townships and the registrars and clerks of the cities, boroughs, towns and other local municipal governments of this state; and it shall be the duty of every such assessor, registrar and clerk to make and keep a complete list, as far as possible, of all ministers, magistrates, physicians, midwives, undertakers and other persons required to perform any duties under this act, and on or about the first day of May of each year to send to each such person a printed copy of such sections of this act and of such instructions and explanations as may be prepared as aforesaid, and also to furnish to each such person, on application, free of charge, a reasonable number of said blank forms as such person may require, and all certificates of marriages, births or deaths shall be made on the printed forms furnished by said bureau, or if they be written shall conform in all respects to said printed forms.

15. [As amended.] Any penalty incurred under any of the provisions of this act which shall relate to any particular marriage, birth, death or burial, may be recovered with costs in a summary proceeding by and in the name of the board of health of the state of New Jersey; any penalty incurred under any of the provisions of this act which shall relate to any particular marriage, birth or death, may also be recovered with costs in a summary proceeding by and in the name of the local board of health of the township, city, borough, town or other local municipal government within whose limits such particular marriage, birth or death shall have occurred; and any penalty incurred which shall relate to any particular burial, if the death occur in this state, may also be recovered with costs in a summary proceeding by and in the name of the local board of health of the township, city, borough, town or other local municipal government within whose limits

the death shall have occurred; but if the death occur out of this state, and the burial be made in this state, then such penalty may also be recovered with costs in a summary proceeding by and in the name of the local board of health of the township, city, borough, town or other local municipal government within whose limits such burial may have been made; in every such summary proceeding a complaint shall be made in writing against the person incurring the penalty, setting forth facts sufficient to present a prima facie case against the defendant, which complaint may be on information and belief and in the name of the state or local board instituting the suit, and may be filed by any member, officer, health inspector or agent of such state or local board, in the office of the clerk of any district court, or with any justice of the peace, police justice or recorder in the township, city, borough, town or municipality whose local board of health is authorized to recover such penalty; and it shall thereupon be the duty of the judge of the district court with which, or of the justice of the peace, police justice or recorder with whom such complaint shall be filed, on being satisfied that a prima facie case is therein set forth, to make an order for the issue of process in the nature of a summons when the complaint is on information and belief, and in other cases either in the nature of a summons or warrant, and to issue such summons or warrant against the defendant; when process is in the nature of a warrant it shall be returnable forthwith, and when in the nature of a summons it shall be returnable in not less than five nor more than fifteen days; on the return of the process, or, in case of adjournment, at the time to which the trial shall have been adjourned, the court or magistrate shall proceed to hear the testimony of witnesses and the proofs in the case, and to determine and give judgment in the matter without the filing of any pleadings, and such judgment shall be in the following or similar form: State of New Jersey, county of ———, ss.: Be it remembered that on this ——— day of ———, in the year of our Lord nineteen hundred ———, at ———, in said county, C. D., defendant, was, by the district court of the city of T. (or, by me, E. F., justice of the peace, police justice or recorder of the city of ———, or as the case may be) convicted of violating the ——— section of an act of the legislature of the state of New Jersey entitled 'An act to secure in this state the certification of marriages, births and deaths, and of the vital facts relating thereto,

and to provide for the record thereof,' approved February fifteenth, eighteen hundred and eighty-eight, in a summary proceeding at the suit of the board of health of the state of New Jersey (or, of the local board of health of the township of A., or as the case may be); and further, that the witnesses in said proceeding who testified for the plaintiff were [name them], and the witnesses who testified for the defendant were [name them]; wherefore, the said court [or justice of the peace, police justice or recorder, as the case may be] doth hereby give judgment that the plaintiff recover of the defendant ——— dollars, penalty, and ——— dollars, costs of this proceeding, and that execution do issue against the goods and chattels of said defendant for the amount of said penalty and costs, and for want of sufficient goods and chattels whereon to levy and make the same, to take the body of the defendant and convey him to the common jail of the county and deliver him to the keeper thereof, to be there confined until the said penalty and costs be fully paid, or until he be thence delivered by due course of law;" said judgment shall be signed by the judge of the district court, justice of the peace, police justice or recorder giving the same; execution shall thereupon be granted by the court, justice of the peace, police justice or recorder giving the judgment, commanding the officer to whom the execution is delivered to levy and make the amount of the penalty and costs imposed by the judgment out of the goods and chattels of the defendant, and for want of sufficient goods and chattels whereon to levy and make the same, to take the body of the defendant and convey him to the common jail of the county and deliver him to the keeper thereof, to be there confined until the said penalty and costs be fully paid, or until he be thence delivered by due course of law; *provided, however*, that no execution shall issue against the body of any female; the officers to serve and execute any process or execution issued as aforesaid shall be the constables of the county, which service and execution shall in all cases be made in the same manner and under the same liabilities that other processes and executions issued out of the district courts of this state are served and executed under and by virtue of the provisions of the act entitled "An act concerning district courts," approved June fourteenth, in the year eighteen hundred and ninety-eight; the cost taxable and recoverable in any case prosecuted as aforesaid shall be the costs allowed by the act last above mentioned in

cases prosecuted in district courts; the penalty recovered in any such action shall be paid to the plaintiff therein, and applied by such plaintiff to any purpose for which it may be legally authorized to expend money; the judge of the district court, justice of the peace, police justice or recorder before whom any case is prosecuted under the provisions of this section may adjourn the hearing thereof from time to time, not exceeding thirty days from the return day of the summons or warrant, and in any case where a warrant shall have been issued may require the defendant to enter into a bond with sufficient surety to the plaintiff in the penal sum of one hundred dollars, conditioned to appear at the time and place of hearing or trial, and, in default of such bond, may commit the defendant to the common jail of the county, to be there detained until the hearing or trial of the complaint; and if any defendant shall fail to appear at the time and place to which the hearing or trial shall be so adjourned the bond shall be delivered to the plaintiff, who may sue thereon and apply the moneys recovered in such suit to any purpose for which it may be legally authorized to expend money.

16. That all acts and parts of acts inconsistent with the provisions of this act be and the same are hereby repealed, and that this act shall take effect immediately.

Approved February 15th, 1888:

UTILITY OF RECORDS OF BIRTHS, MARRIAGES AND DEATHS.

The purpose for which records of vital statistics are collected and preserved may be to establish the right of some individual to vote; to sustain a claim in a pension case; to prove a right of inheritance, or to show eligibility for appointment as a member of the police, fire or other public service. But more important than any of these considerations is the measure afforded by these facts concerning the relative strength and vigor of the population. From these records we learn the average duration of life of the citizens of the State and of those who dwell in each statistical division or district, and what influence upon health and strength is exerted by various trades, occupations and dwelling-places. In these records is found justification for the application of the laws of hygiene, for it is observed that high death-rates

uniformly attend certain conditions which are universally known to be unhealthful. Almost all of these unhealthful influences are preventable, and they may be averted or removed by the exercise of the well-understood precautions which prevent needless pollution of air, soil and water.

Concerning the general public utility of records of births, marriages and deaths, Beneki, the statistician of the German government, has said: "Mortality statistics constitute the basis of public as well as private action for the protection of health, and every fact learned concerning the causes which prevent premature deaths assists in prolonging the working power of individuals and promotes the general welfare of the nation."

The Austrian minister of commerce has said: Statistics relating to births, marriages and deaths are no longer used as a mere theoretical science for the gratification of the curiosity of the learned, since they subserve the practical ends of political society and lend service to administration as well in determining the value of existing institutions and laws as in weighing measures not yet carried out."

An eminent American writer says: "The adoption of the numerical method in dealing with births and deaths marks the application of sanitation to the prevention of disease, for the facts obtained by registration of vital statistics enable the health officer to direct his efforts for the improvement of conditions which are thus proved to be unhealthful. Vital statistics may therefore be regarded as finger-boards pointing to the sanitary measures which will be most effectual in prolonging human life."

Mortality records have shown that the death-rate varies from fifteen to eighty per thousand in different places, and study of local conditions has shown that this wide variation is due to personal and domestic factors and to certain avoidable influences, and it is upon the foundation afforded by these facts that the art of hygiene is founded.

The discoveries concerning the relation of excremental contamination to cholera and typhoid fever were the direct result of the statistical methods of investigation, and the most important sanitary reforms which have occurred during the past century have followed as a result of the collection and publication of records showing the morbidity and mortality tables of the locality.

In this manner "many districts which statistical returns have shown to be in the worst condition have become the best."

Another writer says: "One of the first great objects of sanitary organization should be to watch the death-rate; to watch it, not only over a city or parish, but in detail; to watch it with due regard to differences of sex, age and circumstances; to watch it from month to month, and even from week to week; to watch it as effected by different diseases, and particularly with reference to the communicable diseases, and such as we believe to be preventable; and, this done, to make known the facts from time to time to those who are chiefly concerned in sanitary evils and their removal, so as effectually to bring home the immense significance of the facts taught by these figures."

The method which is at present in operation in New Jersey for the collection and preservation of returns of births, marriages and deaths has been employed since 1878. Previous to that year local records were written in a few localities, and the books prepared by local registrars were forwarded to the secretary of state, Trenton. All of these records are now on file in the office of the Bureau of Vital Statistics, and together with the more recent returns they are available for study and reference.

The defects in the system of registration in this State relate almost solely to the failure on the part of certain professional attendants and parents to report births. This neglect cannot readily be reached by law, but must be overcome by a more widespread understanding of the value to the individual as well as to the State of the records of births.

MARRIAGES.

Neglect on the part of those solemnizing marriages to report the same not only incurs the penalty provided by the law, but often causes much inconvenience in securing evidence concerning questions of great moment. It is the right of each married person that this evidence shall be recorded, and these reports are also essential to the study of social conditions, and of the moral as well as the civic progress and the welfare of society. Those in charge of the various religious bodies at their annual, semi-annual or quarterly meeting should not fail to call attention to

this duty of monthly report and to the breach of law and ethics which the neglect involves.

A prompt return of the certificate to the local registrar or city clerk, or, in townships, to the assessor, is indispensable. Under the laws of this State, the person performing the marriage ceremony may administer the oath as to age, if there is doubt, but the signatures of the parties to the form on the back of the certificate, that they are of lawful age, is also available to prevent the marriage of minors. Marriage licenses must be procured in cases when both parties are non-residents of the State (see Circular 79).

BIRTHS AND DEATHS.

The medical profession recognizes as a public duty the making of these reports, besides the obligation which law and the general interest of society impose. If physicians will carry a few blanks in the pocket-case or visiting record but little inconvenience will be experienced in making the certificates, and the bound books containing blanks for still-births, births and deaths will be found complete and convenient. Physicians and others who are by law required to make certificates will add much to the value of the returns by using ink of good quality and by writing legibly. The facts should be accurately stated, and it should be borne in mind that every omission in filling up a certificate blank may seriously impair the record.

Such terms as general debility, dropsy, old age, sore throat, &c., are rarely defensible. On the other hand, cholera, typhus fever, typhoid fever, diphtheria, cerebro-spinal meningitis, should not be certified to as causes of death, unless the specific character of the disease is clear. When pyæmia, septicæmia or accident occurs the causes of these conditions should be stated. Where there is doubt as to the true cause of death, "Ap.," for approximate, may be written after the name of the disease. Deaths from suicide should not be concealed by such terms as "drowning," poisoning," &c.

In townships the assessor is required to make "special return" of births in neglected cases, but the physician or midwife who shall have attended any such case is not thus relieved of the penalty for failure to certify to such births.

TO UNDERTAKERS.

To obtain the certificate in case of death is a part of the ordinary duty of the undertaker in connection with preparation of the dead body for burial. If the attending physician cannot be found, the undertaker may obtain a certificate of death from some other physician (see section 3, page 8), and where a permit is also required by the law, in cases where the city clerk or registrar cannot be found, any judge of the court of common pleas or any justice of the peace of the county may furnish the permit (see section 6, page 10).

The burial of human remains must be conducted in accordance with the requirements of the act approved March 25th, 1885, which provides that the top of the outside box shall be at least four feet below the natural surface of the ground in the case of adults, and in the case of infants the box shall be at least three and one-half feet below the ground surface.

The transportation by public carriers of the bodies of persons who have died of certain infectious diseases is governed by section 3 of chapter 260 of the laws of 1895, and also by chapter 156 of the laws of 1900, and by regulations made by the State Board of Health (see Circular 102).

Disinterment of dead human bodies is governed by the act approved March 25th, 1885. The law provides that dead bodies shall not be disinterred or removed from any grave or vault between May 1st and November 1st, except by order of a competent court for criminal investigation, until a permit for such disinterment or removal has first been issued by the local board of health where such body is interred. Bodies of persons dead of small-pox and other dangerous communicable diseases shall not be disinterred unless the body was interred at time of death in a metallic air-tight case.

TO REGISTRARS, CITY CLERKS AND ASSESSORS.

This circular will be supplied upon request, and may be sent by local boards of health, registrars, city clerks and assessors to any persons who neglect their duties under the law, or to physicians,

clergymen and others who may take up their residence in the locality. No one, however, can plead ignorance of the law because no such special reminder is received. It is the duty of every assessor, registrar of vital statistics, and city clerk acting as registrar of vital statistics, to keep a list of all local ministers, magistrates, physicians, midwives and undertakers (see section 14, page 13), and, about May 1st, in each year, to send to each such person printed instructions relating to the requirements of the law concerning certificates of marriages, births and deaths, and also to furnish such persons free of charge a reasonable number of blank forms for making such certificates.

With the returns made October 15th of each year all registrars, assessors and city clerks are requested to send to this bureau the names and post-office addresses of any physicians who have commenced practice since the report of the previous year, and of any who have removed or died.

Orders on local treasurers for the payment of fees due on account of certificates of births, marriages and deaths will be transmitted when returns are received to April 1st each year.

All correspondence should be addressed to the State Board of Health and Bureau of Vital Statistics, Trenton, New Jersey.

HENRY MITCHELL, M.D.,

*Secretary and Medical Superintendent
of Vital Statistics.*

DALLAS REEVE,

State Registrar of Vital Statistics.

CIRCULAR 102, JUNE, 1901.

Small-pox.

PREVENTION OF SMALL-POX.

Small-pox has prevailed as a widespread epidemic in a number of the States during the past few years, and New Jersey, because of its being constantly traversed by travelers from all portions of the country, is especially exposed to the infection of this disease. Public attention has repeatedly been called by the State Board of Health to the vaccinal *status* of the inhabitants, and it has been shown that the

number of unvaccinated children has increased from year to year, and that at present nearly 24 per cent. of those within school age are unprotected against small-pox.

An extensive outbreak of small-pox can be prevented with absolute certainty if vaccination of all susceptible persons is secured, and the question now arises, Shall general vaccination be done before a great calamity compels resort to this preventive measure, or must there first be startling losses of life to arouse parents, guardians, school boards, the public, and in too many instances the health authorities also, to a realizing sense of their duty to institute precautions against the spread of this pestilential disease?

Detection of the First Case.—Small-pox has been so frequently mistaken for chicken-pox that the utmost care is necessary on the part of physicians to prevent falling into this error, and rigid isolation of the patient should be practiced in first cases of this and other affections which simulate small-pox, until a diagnosis can be conclusively reached.

In small-pox the shortest incubation period, the period between exposure to infection and the first appearance of symptoms of illness, is seven days; average, twelve days; longest, twenty days. The infective period begins with the onset of the initial symptoms (chill, backache, headache, vomiting and high temperature) and continues until all scabs have disappeared. The greatest infectivity is during the vesicular and pustular stages of the eruption.

Before the appearance of the rash, the liability to impart infection is not great, and therefore isolation of a case very shortly after the appearance of the eruption, when associated with measures for vaccination, re-vaccination and disinfection, is generally effective in preventing further spread of the disease.

In chicken-pox the shortest incubation period is thirteen days; average, fourteen days; greatest, nineteen days. The introductory fever in chicken-pox is usually less intense than in small-pox, and the eruption generally begins on the trunk, often appearing on the second day, and rarely becomes prominent on the face.

In measles the period of incubation is variable, the least being four days; average, eight to ten days; greatest, fourteen days. The fever does not abate upon the appearance of the eruption, but is generally increased. Coryza is a very prominent symptom of measles.

Vaccination.—The protection afforded by successful vaccination is quite as effective as that produced by a previous attack of small-

pox, but there is much uncertainty concerning the duration of this immunity. The operation of vaccination should be conducted with aseptic precautions, and none but glycerinated lymph from a trustworthy producer should be employed. After the arm has been bared the clothing should be securely held away from the site of the proposed abrasion, and the surface should be made clean by thorough washing with warm, sterilized water. After drying with absorbent cotton the skin is scarified in one or more places by the use of a needle which has been rendered sterile by passing it through the flame of an alcohol lamp. One drop of the glycerinated vaccine is then applied and rubbed in with the needle. The clothing should not be allowed to touch the wound until it is dry, and an improvised shield, made by using a large paper bottle cap, held in place by two strips of adhesive plaster, extending not more than half way around the arm, affords desirable protection for the first six hours. Vaccination has caused undesirable results only in cases when uncleanly methods have been employed in collecting or inserting the lymph, and as at present conducted the operation is free from all objection.

The following measures are recommended for adoption by local boards of health for preventing the spread of small-pox:

1. Offer free vaccination and re-vaccination to all persons who cannot or will not pay for this service.
2. Advise parents to cause every child to be vaccinated before reaching the age of one year.
3. Advise that re-vaccination should be practiced as often as once every five years, and if a case of small-pox appear in the neighborhood, all persons in the vicinity should be at once vaccinated or re-vaccinated.
4. Urge boards of education to enforce the provisions of section 22 of chapter 68 of the laws of 1887, which authorize exclusion from the public schools of all pupils who have not been vaccinated.
5. Call the attention of boards of education to sections 122 and 123 of chapter 96, laws of 1900, which authorize said boards to secure the vaccination of pupils.
6. In factories, the superintendent should be advised to direct all employes to be vaccinated.
7. Provide a suitable isolation hospital and arrange for medical care, nursing and hospital supplies. It should be remembered that domestic quarantine is unreliable, and that no method for the isola-

tion of infected persons is so effectual as that which attends hospital segregation.

8. Require physicians and parents to notify the local health officer of every case of chicken-pox. Authority for this requirement is contained in sub-section 3, section 12 of chapter 68, laws of 1887.



9. Prosecute vigorously every person who violates section 1 of chapter 260 of laws of 1895, which requires that the local board of health shall be immediately notified of every case of small-pox.

10. When recovery occurs the patient should not be discharged until desquamation has entirely ceased, nor until the redness at the bottom of the pocks has disappeared. The surface of the body should then be bathed in a solution of bichloride of mercury (1 to 1,000), and afterward washed with water. Clean clothing should be provided.

11. In case of death the body should be at once enveloped in sheets saturated with the solution of bichloride of mercury (1 to 1,000), and be placed in an hermetically sealed metallic coffin. The burial should take place without delay, and should be strictly private.

Disinfection.—Immediately after the removal of a patient from an apartment or building the infected rooms and all of their contents should be treated by the free application of a solution of bichloride of mercury (1 to 1,000). Garments, sheets, blankets, &c., should be immersed in the same solution in wooden tubs, and all other articles, including mattresses, pillows and carpet, should be saturated with the solution. The side walls and woodwork should be wetted with the solution by the use of a garden-pump and hose, with a spray-producing nozzle. Varnished surfaces should be immediately wiped with dry cloths to prevent the spotting caused by water.

After twenty-four hours the clothing, blankets, sheets, pillow-cases, towels, &c., should be boiled for at least two hours. Articles of little value should be burned in the sick-room. When practicable, remove all remaining articles which can be transported to a sterilizing chamber, and expose them to steam at a temperature of 240° for thirty minutes. In localities where no sterilizing plant is provided, the mattresses, pillows, carpet, books and all other articles which cannot be boiled should be destroyed by fire.

 The State Board of Health should be at once notified by the local health officer, by wire (State House, Trenton), on the appearance of small-pox, and co-operation will be undertaken when necessary to prevent the spread of the disease. 

CIRCULAR 103, OCTOBER, 1901.

Foods and Drugs.

**ACTS GOVERNING THE SALE OF FOODS AND DRUGS IN
NEW JERSEY.**

AN ACT to secure the purity of foods, beverages, confectionery, condiments, drugs and medicines, and to prevent deception in the distribution and sales thereof.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. The term "food" as used in this act shall include every article used for food or drink by man, and every ingredient in such article, and all confectionery; and the term "drug" as used in this act shall include every article of medicine for internal or external use, and every ingredient in such article.

2. The following drugs shall be deemed to be impure within the meaning of this act: (1) any drug which, being known under or by a name recognized in the United States pharmacopœia, possesses a strength, quality or degree of purity inferior to or different from that laid down in such pharmacopœia; (2) any drug which, not being known under or by a name recognized in the United States pharmacopœia, but which is found in some other pharmacopœia, or in some other standard work on materia medica, possesses a strength, quality or degree of purity inferior to or different from that laid down in such other pharmacopœia or standard work, and (3) any drug whose strength, quality or degree of purity falls below the professed standard under which it is sold.

3. The following foods shall be deemed to be impure within the meaning of this act: (1) any food which is rendered poisonous or injurious to health, or whose quality, strength or degree of purity is injuriously reduced, lowered or affected by adding thereto or mixing therewith any other substance or substances; (2) any food for any of whose constituents there have been substituted any substance or substances inferior to or cheaper than the constituents naturally or customarily composing such food or any part thereof; (3) any food from which has been wholly or partially abstracted any valuable or necessary constituent; (4) any food which con-

sists wholly or in part of diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance, whether manufactured or not, and (5) in the case of milk, if it contain more than eighty-eight per centum of watery fluids or less than twelve per centum of milk solids, or if any water, drug, chemical, preservative or other substance be added thereto or mixed therewith; no person shall kill or aid in killing, for human food, any calf less than three weeks old, or sell or offer for sale, or have in his possession with intent to sell, for human food, any such calf or any of the meat thereof.

4. No person shall distribute or sell, or have in his possession with intent to distribute or sell, any article of food or drug which, under any of the provisions of this act, is or shall be deemed to be impure.

5. No person shall distribute or sell, or offer to distribute or sell, any article of food or any drug which is an imitation of some other article of food or of some other drug under or by the name of the article of food or drug imitated, but the same shall be distributed and sold, or offered for distribution or sale, only by the true name of the imitation.

6. No person shall distribute or sell, or offer for distribution or sale, or have in his possession with intent to distribute or sell, any article of food which shall have been colored, coated, polished, powdered or treated in such manner as to conceal any element of injury or damage therein or any inferiority of quality thereof.

7. No person shall keep cows for the production of milk in a crowded or unhealthy place or condition, or feed any cow kept for the production of milk on swill, or any substance in a state of putrefaction or rottenness, or any substance of an unwholesome nature, or on any food or substance that may produce diseased or unwholesome milk; and no person shall distribute or sell, or offer to distribute or sell, or have in his possession with intent to distribute or sell, any milk which is the produce of cows so kept or fed.

8. No person having the possession or care of any milk shall permit it to be exposed to, or contaminated by, the emanations, discharges or exhalations from any person or persons sick with any contagious disease; and no person shall distribute or sell, or offer to distribute or sell, or have in his possession with intent to distribute or sell, any milk which has been so exposed or contaminated.

9. No person shall sell, or offer or expose for sale, or have in his possession for the purpose of sale, any milk from which the cream or any part thereof has been removed, unless every can, vessel or package containing such milk shall have a metal label or tag of metal distinctly, durably and permanently soldered in a conspicuous place upon the outside and not more than six inches from the top thereof, with the words "skimmed milk" stamped, indented or engraved on the label or tag in letters not less than two inches in height, and the several lines of which shall be not less than three-eighths of an inch in width; *provided, however,* that every glass bottle, in lieu of such label or tag, may have blown in it the words "skimmed milk" in letters which shall not be less than one inch in height, and the several lines of which shall be not less than one-eighth of an inch in width; such milk shall only be sold or shipped in or retailed out of a can, bottle, vessel or package so marked.

10. No person shall sell, supply or bring to be manufactured to any person or party operating any cheese or butter manufactory in this state any milk which, under any of the provisions of this act, is or shall be deemed to be impure, or from which the cream or any part thereof has been removed or the sale of which by any of the provisions of this act is prohibited.

11. The state board of health shall have the power from time to time to adopt, promulgate and publish, by circular or otherwise, such general rules and regulations for the government of the analysts, chemists, chief inspector, and such other inspectors and employes appointed by the said board as they may deem proper; they shall also have the power to give to any analysts, chemists or chief inspector, or other inspector or employe appointed by the board, such orders concerning any performance of duty as they from time to time may deem proper; they shall also have the power from time to time to appoint such analysts, chemists, chief inspector and other inspectors and employes as they may deem proper, who shall hold their respective positions during the pleasure of said board and perform such general or special services as said board may by their general rules and regulations or by their special orders require, and to fix and allow to said analysts, chemists, chief inspector and other inspectors and employes, respectively, such salaries, fees or compensation as the said board shall deem to be reasonable, which salaries, fees and compensation

shall be paid out of the appropriations from time to time made by the legislature for carrying out the provisions of this act; the said board shall have the power, and it shall be their duty, through said analysts, chemists, chief inspector and other inspectors and employes and in such other ways as the said board may deem practicable, to make inquiries and investigations concerning alleged or probable violations of any of the provisions of this act, to cause any and all persons guilty of any violation thereof to be prosecuted under the provisions of this act, and, generally, to adopt, carry out and enforce such rules and regulations as shall promote the purposes of this act.

12. Every person who shall distribute or sell, or offer for distribution or sale, or have in his possession with intent to distribute or sell, any article of food or drug, shall, on the request therefor and the tender of the value thereof by any chief or other inspector appointed under the authority of this act, deliver to such chief or other inspector so much of any such article of food or drug as such chief or other inspector may request; said inspector shall at the time of the sale, in the presence of the person selling, divide said sample into two parts, and shall duly seal each part in a suitable can, vessel or package, and shall tender, and if accepted shall deliver, at the time of taking said sample, one part to the person selling, with a statement in writing of the cause of the sample having been taken, and in any prosecution of the seller of any food or drugs for violation of any statute of this state relative thereto, no proof of the result of any analysis thereof shall be given in evidence by the prosecutor unless a part of the sample of the article complained of shall have been sealed up and tendered to the seller as aforesaid.

13. Every person who shall violate any of the provisions of this act, and every person who shall obstruct or in anywise interfere with any analysts, chemists, chief inspector or other inspector or employe of the state board of health in the performance of any duty under this act, shall be liable to a penalty of fifty-dollars; *provided, however*, that if any person charged with the violation of any of the provisions of this act concerning impure foods or impure drugs shall prove at the hearing or trial of the complaint that the article alleged to be impure was produced under a warranty from any person or persons residing within this state, in the form hereinafter set forth, that said article was pure within

the meaning of this act, and prior to the hearing or trial shall have filed in the district court, or with the justice of the peace, police justice or recorder, before whom the case is prosecuted, and with the attorney of the prosecutor of the case, a copy of such warranty, the person so complained against shall be discharged from prosecution; the warranty to justify such discharge shall specifically name and describe the article or articles warranted and shall be of the following form, to wit: "It is hereby warranted that the following-described article or articles, to wit, ———, are pure and unadulterated within the meaning of the act of the legislature of the state of New Jersey entitled 'An act to secure the purity of foods, beverages, confectionery, condiments, drugs and medicines, and to prevent deception in the distribution and sales thereof,' approved the ——— day of ———, A. D. nineteen hundred and one;" every such warranty shall be signed by the warrantor, but no warranty shall be a defense if the person offering it shall have been notified prior to the sale complained of, that the article or articles mentioned in it were impure within the meaning of this act.

14. Every district court and every justice of the peace in any city or county, and every police justice or recorder in any city, is hereby empowered on complaint under oath or affirmation made according to law that any person or persons has or have violated any of the provisions of this act, to issue process, in the name of the board of health of the state of New Jersey, as prosecutor, for the use of the state of New Jersey, or in the name of any local board of health of the township, city, borough, town or other municipal government within whose limits the penalty may have been incurred, as prosecutor, for the use of such township, city, borough, town or other local municipal government; said oath or affirmation, if made by any member, inspector, or other officer of the state board of health, or of any local board of health, may be upon information or belief; said process shall be in the nature of either a summons or warrant against the person or persons so charged; when in the nature of a warrant, it shall be returnable forthwith, but before any warrant shall issue out of any district court the judge thereof shall indorse upon the complaint an order in the following or similar words, "let the warrant issue in this case," to which said judge shall sign his name; and when in the nature of a summons it shall be returnable in not less than one or

more than ten entire days; such process shall state what section of the law is alleged to have been violated by the defendant or defendants; and on the return thereof, or at any time to which the trial shall have been adjourned, the said district court, justice of the peace, police justice or recorder, if no jury be demanded in accordance with the provisions of the next succeeding section, shall proceed to hear the testimony, and to determine and give judgment in the matter, without the filing of any pleadings, either for the prosecutor for the recovery of such penalty, with costs, or for the defendant or defendants; if such judgment be for the prosecutor as aforesaid, it shall be in the following or similar form: "State of New Jersey, county of ———, ss.: Be it remembered that on this ——— day of ———, in the year of our Lord nineteen hundred ———, at ———, in said county, C. D., defendant, was, by the district court of the city of T. [or by me, E. F., justice of the peace, police justice or recorder of the city of ———, or as the case may be], convicted of violating the ——— section of the act of the legislature of New Jersey entitled 'An act to secure the purity of foods, beverages, confectionery, condiments, drugs and medicines, and to prevent deception in the distribution and sales thereof,' approved the ——— day of ———, A. D. nineteen hundred ———, in a summary proceeding, at the suit of the board of health of the state of New Jersey [or of the local board of health of the township of A., or as the case may be], as prosecutor; and further, that the witnesses in said proceeding who testified for the prosecutor were [name them]; and the witnesses who testified for the defendant were [name them]; wherefore, the said court [or justice of the peace, police justice or recorder, as the case may be] doth hereby give judgment that the prosecutor recover of the defendant fifty dollars penalty and ——— ——— dollars costs of this proceeding, and that execution do issue against the goods and chattels of said defendant for the amount of said penalty and costs, and for want of sufficient goods and chattels whereon to levy and make the same, to take the body of the defendant and convey him to the common jail of the county and deliver him to the keeper thereof, to be there confined until the said penalty and costs be fully paid, or until he be thence delivered by due course of law;" said judgment shall be signed by the judge of the district court, justice of the peace, police justice or recorder giving the same.

15. Either party to any proceeding instituted under the provisions of this act may, at any time previous to the hearing of the complaint in such proceeding, demand a trial by jury, and if a jury is demanded a venire shall be issued to summon a jury of twelve men, being citizens of this state above the age of twenty-one years and under the age of sixty-five years, and in nowise akin to the defendant or defendants, nor interested in the proceeding, to be and appear before the district court, justice of the peace, police justice or recorder issuing the venire, at such time and place as shall be expressed therein, to make a jury for the trial of the matter mentioned therein; and the constable or sergeant-at-arms shall, at the return of the said venire, return, annexed thereto, a panel containing the names of the jurors whom he shall have summoned by virtue thereof; and if, on the return of the venire, it shall appear that one or more of the jurors are disqualified to serve, or do not appear, then it shall be lawful for the constable or sergeant-at-arms who served the same, by order of the court, justice of the peace, police justice or recorder before whom the trial is to be had, immediately to summon others who shall serve in their stead; such jury, having been first duly sworn or affirmed according to law, with the court, justice of the peace, police justice or recorder before whom the trial is to be had, shall thereupon proceed to hear the testimony, the jury rendering their verdict upon the facts, and the court, justice of the peace, police justice or recorder deciding upon all questions of law; if the jury find the defendant or defendants guilty, the court, justice of the peace, police justice or recorder shall give judgment in the matter, without the filing of any pleadings, for the prosecutor for the recovery of said penalty with costs; if the jury find the defendant or defendants not guilty, the judgment shall be generally for such defendant or defendants; if judgment be given for the prosecutor as aforesaid, it shall be in the following or similar form: "State of New Jersey, county of ———, ss.: Be it remembered that on this ——— day of ———, in the year of our Lord nineteen hundred and ———, at ———, in said county, C. D., defendant, was, by a jury duly summoned before the district court of the city of T. [or, before me, E. F., justice of the peace, police justice or recorder of the city of ———, or as the case may be], convicted of violating the ——— section of the act of the legislature of the state of New Jersey entitled 'An act to secure the purity of foods,

beverages, confectionery, condiments, drugs and medicines, and to prevent deception in the distribution and sales thereof,' approved the ——— day of ———, A. D. nineteen hundred and ———, in a summary proceeding, at the suit of the board of health of the state of New Jersey [or of the local board of health of the township of A., or as the case may be], as prosecutor; *and further*, that the witnesses in said proceeding who testified for the prosecutor were [name them], and the witnesses who testified for the defendant were [name them], wherefore, the said court [or justice of the peace, police justice or recorder, as the case may be] doth hereby give judgment that the prosecutor recover of the defendant fifty dollars penalty and ——— dollars costs of this proceeding, and that execution do issue against the goods and chattels of said defendant for the amount of said penalty and costs, and for want of sufficient goods and chattels whereon to levy and make the same, to take the body of the defendant and convey him to the common jail of the county and deliver him to the keeper thereof, to be there confined until the said penalty and costs be fully paid, or until he be thence delivered by due course of law;" said judgment shall be signed by the judge of the district court, justice of the peace, police justice or recorder giving the same.

16. If any party in any such action or proceeding shall be dissatisfied with the determination or direction of said court in point of law or fact, or upon the admission or rejection of evidence, such parties may appeal from the same to the circuit court of the county wherein said action is had; *provided*, that such party shall, within five days after such determination or direction, give notice of such appeal to the other party or his attorney, and enter into bond to the other party with at least one sufficient surety, being a freeholder of said county, to be approved by the judge or justice of the peace, for the costs of appeal, whatever be the result thereof, and for double the amount, if any, for the judgment rendered against him, conditioned for the payment thereof if the appeal be not prosecuted by the appellant or be dismissed; such security, so far as regards the amount of the judgment, shall not be required in any case where the party appealing shall pay the amount of such judgment in the hands of the clerk of the court, but such appeal shall operate as a stay of proceedings only after such security has been given or money paid; either party to any

said cause may make application to the court for the appointment of a stenographer to transcribe all proceedings at the trial of said cause, and to prepare a transcript of the same and of the pleadings and judgment therein, for use on appeal; said application shall be made at such times as said court shall by rule direct, or as the judge or justice of the peace thereof in his discretion shall permit; it shall thereupon be the duty of said judge or justice of the peace to grant said application, and to designate a stenographer to act as aforesaid in said case; in case no appeal is taken in said case and no transcript of the proceedings required, the stenographer shall receive as compensation for services at the trial a fee of five dollars for each day spent in attendance at said trial, to be paid in the first instance by the party making the application, but to be taxed in the costs of the suit and recovered by the prevailing party, if theretofore paid by him, upon execution thereof if necessary; in case an appeal be taken in said cause, the transcript of the record made by said stenographer as aforesaid, subject to correction, shall be certified by the judge or justice of the peace as the state of the case for appeal, and such case shall be transmitted by the clerk of said district court to the clerk of the circuit court of the county in which said district court is located, and filed by him in his office; in any such case the fees of said stenographer shall likewise be certified by said judge or justice of the peace and shall be paid in the first instance by the party making said application, but shall be taxable in the costs of said suit as finally determined and recovered by the prevailing party, if theretofore paid by him, upon execution if necessary; in any such case there shall be no attendance fee paid to said stenographer, but he shall be entitled to receive ten cents a folio for said transcript; in case no such application as authorized by the preceding section be made, and the case shall not have been taken stenographically in accordance therewith, then such appeal shall be in the form of a case agreed on by both parties or their attorneys, and if they cannot agree, the judge or justice of the peace on being applied to by them or their attorneys, shall, upon such notice as said judge shall prescribe, settle the case and sign it, and such case shall be transmitted by the appellant to the said clerk of the circuit court and filed by him in his office; such case shall be agreed upon or settled within fifteen days after such determination or direction unless the judge

shall grant further time for that purpose; the case shall be heard on appeal in the said circuit court at the next term after such determination or direction unless the said court shall on good cause shown postpone the hearing thereon to some subsequent term; *provided*, that there shall be fifteen days between such determination or direction and said next term of the said circuit court; on the hearing of the said appeal, said circuit court shall either affirm or reverse said judgment of the district court, or may order judgment to be entered for either party, as the case may be, and may make such order with reference to the dismissal and costs of the said appeal as said court may think proper; such order, determination or decision of the circuit court may be removed into the supreme court or court of errors and appeals by a writ of error; said writ shall remove such order or determination and the case agreed upon or settled as hereinbefore mentioned, provided the party applying for the same comply with the provisions of this act.

17. In case judgment as aforesaid shall be rendered against any defendant, in any such proceedings as aforesaid, execution shall thereupon be granted by the court, justice of the peace, police justice or recorder giving the judgment, commanding the officer to whom the execution is delivered to levy and make the amount of the penalty and costs imposed by the judgment out of the goods and chattels of the defendant, and for want of sufficient goods and chattels whereon to levy and make the same, to take the body of the defendant and convey him to the common jail of the county and deliver him to the keeper thereof, to be there confined until the said penalty and costs be fully paid, or until he be thence delivered by due course of law.

18. The officers to serve and execute any process or execution issued as aforesaid shall be the constable of the county, and within the jurisdiction of any district court shall include the sergeant-at-arms thereof, which service and execution shall in all cases be made in the same manner and under the same liabilities that other processes and executions issued out of the district court of this state are served and executed under and by virtue of the provisions of the act entitled "An act concerning district courts," approved June fourteenth, in the year eighteen hundred and ninety-eight; the costs taxable and recoverable in any case prosecuted as aforesaid shall be the costs allowed by the act last above men-

tioned in cases prosecuted in district courts; the penalty recoverable in any such action shall be paid to the prosecutor therein, who shall pay the same into the treasury of this state when such prosecutor is the state board of health, and when the prosecutor is a local board of health such local board shall pay the penalty into the treasury of the township, city, borough, town or other local municipal government within which such local board has jurisdiction; the judge of the district court, justice of the peace, police justice or recorder before whom any case is prosecuted under the provisions of this act may adjourn the hearing thereof from time to time, not exceeding thirty days from the return day of the summons or warrant; and in any case where a warrant shall have been issued may require the defendant to enter into a bond with sufficient surety to the plaintiff in the penal sum of two hundred dollars, conditioned to appear at the time and place of the hearing or trial, and in default of such bond may commit the defendant to the common jail of the county, to be there detained until the hearing or trial of the complaint; and if any defendant shall fail to appear at the time and place to which the hearing or trial shall be so adjourned, the bond shall be delivered to the prosecutor, who may sue thereon, and all moneys recovered in such suit shall be paid by the prosecutor into the same treasury into which it is above required to pay the penalty recovered from any defendant for violation of any of the provisions of this act.

19. Any person who shall give or utter any false warranty of the form prescribed in the fifteenth section of this act, shall be guilty of a misdemeanor, and, on conviction thereof, shall be punished by a fine of not more than five hundred dollars, or imprisonment at hard labor for not more than one year, at the discretion of the court.

20. The state board of health may expend annually for the purposes of carrying out the provisions of this act a sum not exceeding fifteen thousand dollars, which sum shall be paid by the treasurer of this state upon the warrants of the comptroller; *provided, however*, that an appropriation therefor shall first be made by the legislature; and should this act go into effect the sum appropriated to the use of the dairy commissioner shall be placed to the account of the state board of health.

21. The office of state dairy commissioner is hereby abolished, and all duties now imposed upon the state dairy commissioner by

an act of the legislature not repealed by this act, shall hereafter be performed by the chief inspector appointed under the authority of this act, and under the direction of the state board of health.

22. The following acts are hereby repealed: "An act to protect butter and cheese manufacturers," approved March twenty-third, eighteen hundred and sixty-five; "An act relative to the dairy commissioner," approved June thirteenth, eighteen hundred and ninety-five; "An act to prevent the adulteration and to regulate the sale of milk," approved March fourteenth, eighteen hundred and eighty-two, and all acts supplementary thereto and amendatory thereof; "An act to prevent the adulteration of food or drugs," approved March twenty-fifth, eighteen hundred and eighty-one, and all acts supplementary thereto and amendatory thereof; "An act to prevent the adulteration of candy," approved March fourteenth, eighteen hundred and ninety-five, and "An act to prevent deception in the sale of cakes and biscuits and to preserve the public health," approved March twenty-second, eighteen hundred and ninety-five, and all other acts and parts of acts inconsistent with this act.

23. This act shall take effect on the first day of November, in the year nineteen hundred and one.

Approved March 21st, 1901.

AN ACT to prevent deception in the sale of oleomargarine, butterine or any imitation of dairy products, and to preserve the public health.

1. That no person shall offer or expose for sale, or sell, or have in possession for the purposes of sale, any oleomargarine or butterine or suine, or any substance in imitation or semblance of natural butter or cheese, or any substance that is rendered, made, manufactured or compounded out of any animal or vegetable or mineral fat or oil, not produced from pure milk or cream from pure milk, unless contained in, or sold out of or in tubs, pails, firkins, vessels or other packages marked and labeled as required by section three of this act.

2. That no person shall offer or expose for sale, or sell, or have in possession for the purposes of sale, any mixture or compound of natural butter or cheese with oleomargarine, butterine, suine

or any animal or vegetable or mineral fat or oil, or any substance not the product of pure milk or cream from pure milk, except such mixture or compound shall be sold out of or in or contained in tubs, firkins, pails, vessels or packages marked or labeled as required by section three of this act.

3. That no oleomargarine, butterine or suine, or any substance or compound or mixture in imitation or semblance of natural butter or cheese, or any substance that is rendered, made, manufactured or compounded out of animal or vegetable or mineral fat or oil, not the product of pure milk or cream from pure milk, shall be sold or exposed or offered for sale, or held in possession for the purposes of sale, except when contained in tubs, pails, boxes, firkins, vessels or other packages that are marked or labeled as follows, to wit: every such tub, pail, box, firkin or other vessel or package shall have painted on the outside thereof, and midway between the top and bottom thereof, a stripe or band at least three inches wide, and extending completely around said vessel or package, and said stripe or band shall be painted with black paint; every such vessel or package shall have legibly branded and burnt in, by means of a branding or burning-iron, on the outside of the cover and on the outside of said vessel or package, in two places as nearly opposite each other as possible, the words "oleomargarine," "butterine," "suine" or "imitation butter," or "imitation cheese," as the case may be, and said name or title shall be composed of Roman letters at least one-half an inch high and at least one-quarter of an inch broad; and said name or title shall be at least ten inches long; and every such tub, pail, box, firkin or other vessel or package shall bear a label or shall have branded on it a mark giving the name and address of the maker of the contents thereof, and the name and location of the manufactory.

4. [Amended by section 24, *post.*]

5. That no person shall offer or expose for sale, or sell, or have in possession for the purposes of sale, any oleomargarine, butterine, suine or any substance in imitation of natural butter or cheese, or any substance that is rendered, made, manufactured or compounded out of any animal or vegetable or mineral fat or oil, not produced from pure milk or cream from pure milk, that is colored, stained or mixed with annatto or any other coloring matter or substance.

6. That for the purposes of this act the terms "natural butter," or "natural butter or cheese," shall be taken to mean the product or products usually known by these names and which are made and manufactured exclusively from milk or cream, or both, with salt or salt and rennet, and with or without coloring matter or sage; and the terms "oleomargarine," "butterine," "suine" or "substance in imitation or semblance of natural butter or cheese," shall be to mean any substance that is rendered, made, manufactured or compounded out of any animal or vegetable or mineral oil or fat, not the product of pure milk or the cream from pure milk; also, any compound or mixture of natural butter or cheese, or milk or cream, with any of these substances not milk or cream.

7. That the possession by any person who is either manufacturer, merchant, broker, wholesale or retail dealer, or a hotel, inn, restaurant or boarding-house keeper, of any oleaginous substance, mixture or compound whatever as defined by this act, not natural butter, that is not contained in a tub, box, pail or vessel, plainly marked and branded in accordance with the provisions of section three of this act, shall be *prima facie* evidence of intent to sell the same.

8. That no person shall in any way or manner erase, cancel or obliterate, deface or cover over or remove either the band or stripe of paint, or the brands required by section three of this act to be placed on the tub, box, pail or vessel containing any oleaginous substance, mixture or compound, as defined by this act.

9. That every person who shall violate any of the provisions of this act shall be liable to a penalty of one hundred dollars for the first offense, and two hundred dollars for each second or subsequent offense.

10. That every district court in any city, and every justice of the peace in any county, and any recorder in any city, is hereby empowered on oath or affirmation made according to law that any person or persons has or have violated any provision of this act, to issue process at the suit of the commissioner hereafter named as plaintiff, for the use of the state of New Jersey, either in the manner of a summons or a warrant against the person or persons so charged, which process shall, when in the nature of a warrant, be returnable forthwith, and when in the nature of a summons shall be returnable in not less than one or more than ten entire days; such process shall state what provision of the law

is alleged to have been violated by the defendant or defendants, and on the return of such process, or at any time to which the trial shall have been adjourned, the said court, justice of the peace or recorder shall proceed to hear testimony and to determine and give judgment in the matter, without the filing of any pleadings, for the plaintiff, for the recovery of such penalty, with costs, or for the defendant; and the said court, justice of the peace or recorder shall, if judgment be rendered for the plaintiff, forthwith issue execution against the goods and chattels and person of the defendant or defendants; and the said court, justice of the peace or recorder is further empowered to cause any such defendant, who may refuse or neglect to pay the amount of the judgment rendered against him, and all the costs and charges incident thereto, unless an appeal is granted, to be committed to the county jail for any period not exceeding ninety days.

11. That the officers to serve and execute all process under this act shall be the officers authorized to serve and execute process in said courts, and before such magistrates and officers as aforesaid, including the constables of such counties and all police officers of such cities.

12. That said district court, justice of the peace or recorder shall have power to adjourn the hearing or trial in any case, from time to time, not exceeding thirty days from the return of the summons or warrant, and to bail the person so charged in such sum as he shall deem proper for his appearance at such time and place as said trial or hearing shall be adjourned to, and in default of bail to commit the person so charged to the common jail of said county, to be there detained until the trial or hearing of said charge.

13. That either the complainant or defendant, upon paying all costs incurred and by filing with said district court, justice or recorder, within ten days after trial before him, a written notice of his or her intention to appeal from the decision of said court, justice or recorder, may appeal to the next court of general quarter sessions of the peace of the county in which said complaint may have been determined, and said court of general quarter sessions shall proceed and try the same and make such adjudications as are herein provided in case of such trial before said district court, justice or recorder.

14. That all penalties imposed under this act shall be immediately, on receipt, paid into the treasury of this state by the commissioner.

* * * * *

16. That the said commissioner shall be authorized to expend for the purposes of this act an amount not exceeding ten thousand dollars in any one year, and all expenses shall be paid by the treasurer of this state on warrant of the comptroller, upon presentation of properly-certified accounts made by said commissioner, but such expenses shall not exceed in any one year the amount stated in this section.

17. That the said commissioner, and assistants, and clerks, and agents, as shall be duly commissioned so to do by the commissioner, shall have full and free access, ingress and egress to all places of business, factories, farms, buildings, hotels, restaurants, boarding-houses, carriages, cars, vessels and cans used in the manufacture and sale of any dairy products, or any imitation thereof; they shall also have the power to open any package, can or vessel containing such articles which may be manufactured, sold or exposed for sale in violation of the provisions of this act, if they have reason to believe it is being violated, and may inspect the contents therein, and may take therefrom samples for analysis.

18. That this act and each section thereof is declared to be enacted to prevent deception in the sale of oleomargarine, butterine or any imitation of any dairy product, and to preserve the public health.

19. That an act entitled "An act for the protection of dairy-men, and to prevent deception in sales of butter," approved February twenty-first, one thousand eight hundred and eight-four, and an act entitled "An act to prohibit the manufacture and sale of impure and imitation dairy products," approved May fifth, one thousand eight hundred and eighty-four, and all acts and parts of acts inconsistent or in conflict with this act be and the same are hereby repealed.

Approved March 22d, 1886.

SUPPLEMENT.

1. That nothing in said act shall be so construed as to permit the sale or the offering or exposing for sale, or the having in possession for the purposes of sale, of any oleomargarine or butterine, or any substance in imitation of natural butter, that is colored, stained or mixed with annatto or any other coloring matter or substance.

* * * * *

5. That the conviction in prosecutions under the act to which this is a supplement shall be in the following or similar form:

State of New Jersey, county of A., ss.:

Be it remembered that on this _____ day of _____, at _____, in said county, C. D., defendant, was, by the district court of the city of J. [or by the recorder, or as the case is], convicted of violating the _____ section of "An act to prevent deception in the sale of oleomargarine, butterine or any imitation of dairy products, and to preserve the public health," approved March twenty-second, one thousand eight hundred and eighty-six, in a summary proceeding at the suit of A. B., state dairy commissioner, who sues for the use and benefit of the state of New Jersey, plaintiff, upon a complaint made by E. F.; and, further, that the witnesses in said proceeding who testified for the plaintiff were [name them], and the witnesses who testified for the defendant were [name them]; wherefore the said court [or recorder, or as the case is] doth hereby give judgment that the plaintiff recover of the defendant one hundred dollars penalty, and _____ dollars costs of this proceeding.

The said conviction shall be signed by the judge of the district court, recorder or other magistrate before whom the conviction is had; in case of the infliction of a penalty of two hundred dollars the conviction shall contain a statement that it appeared that the defendant had been previously convicted of violating the said act; when an appeal is taken there shall be sent to the appellate court a copy of the complaint, summons, conviction or judgment and notice of appeal; the costs in prosecutions under the act to which this is a supplement shall be the same as costs in the district courts in actions on contract.

Approved April 21st, 1887.

SUPPLEMENT.

1. That no person, by himself or his agents or servants, nor as an agent or servant, shall render or manufacture, sell, offer for sale, expose for sale or have in his possession with intent to sell, any article, product or compound made wholly or partly out of any fat, oil or oleaginous substance or compound thereof, not produced from unadulterated milk or cream from the same, which shall be artificially colored in imitation or semblance of yellow butter produced from pure, unadulterated milk or cream of the same; *provided*, that nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in the manner regulated by the act to which this is a supplement, and in such manner as will advise the consumer of its real character, free from artificial color that causes it to look like butter.

2. That any person or persons who shall sell any article mentioned in the preceding section of this act, representing the same as butter made from unadulterated milk or cream or any product other than it really is, except in the manner provided in existing laws, shall be guilty of a misdemeanor, and upon conviction thereof be punished by imprisonment not exceeding six months or a penalty of two hundred dollars, in the discretion of the committing magistrate or court.

Approved March 25th, 1895.

AN ACT to prohibit the sale of adulterated and skimmed milk in cities of this state.

1. That no milk which has been watered, adulterated or changed in any respect by the addition of water or other substance, or by removal of cream, or any part thereof, shall be kept or offered for sale in any city of the first class in this state.

2. That any person who shall violate any of the provisions of this act shall be liable to a penalty of fifty dollars for the first offense and one hundred dollars for a second or subsequent offense, and that such penalties shall be recovered upon like evidence, by like procedure, and in the same method now provided

for the collection of fines and penalties, under the act entitled "An act to prevent the adulteration and to regulate the sale of milk," approved March fourteenth, one thousand eight hundred and eighty-two.

Approved March 23d, 1883.

AN ACT to provide for the regulation and control of the slaughter of horses and the sale of horse flesh for food.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. Local boards of health shall have power to pass, alter and amend ordinances for the following purposes in addition to the purposes now authorized by law:

I. To regulate and control the sale of horses for food, to provide for their inspection both before and after slaughter, and to provide for the granting of permits to carry on the business of slaughtering horses for food;

II. To regulate and control the manner of constructing, repairing, furnishing and caring for houses and buildings used, or intended to be used, for the slaughter of horses in all matters relating to their sanitary condition, and to regulate and control the locating of such houses and buildings.

2. Any local board of health may prescribe a penalty, not exceeding one hundred dollars, for the violation of any ordinance or any section of any ordinance adopted under the authority of this act, which penalty shall be recoverable in the same manner as any penalty may be recovered for the violation of any ordinance adopted under the provisions of the act entitled "An act to establish in this state boards of health and a bureau of vital statistics, and to define their respective powers and duties," approved March thirty-first, eighteen hundred and eight-seven, and the supplements thereto.

3. No person shall sell, or offer or expose for sale, or in anywise aid in selling, or offering or exposing for sale, any horse flesh unless every carcass, piece and parcel of horse flesh so sold, or offered or exposed for sale, shall have conspicuously attached thereto a label or tag not less than three inches wide and four inches long, on

which shall be printed or stamped, in letters not less than one inch in height, the words "horse flesh;" and any person who shall violate any of the provisions of this section shall be liable to a penalty of one hundred dollars; every such penalty may be recovered, with costs, in a summary proceeding either in the name of the board of health of the state of New Jersey or in the name of the local board of health of the township, city, borough, town or other local municipal government within whose jurisdiction the penalty may have been incurred; it shall be the duty of any inspector appointed by the state board of health, and of any member of any local board of health, and of any local health inspector, who shall know or be informed of any violation of any of the provisions of this act, to make, and any other person having such knowledge may make, under oath or affirmation, a complaint in writing against the person or persons, co-partnership of persons or corporation incurring such penalty, setting forth the facts of such violation, which complaint may be on information and shall be filed with the clerk of any district court or with any justice of the peace of the county within which the offense may have been committed, or with any police justice or recorder of the city or other municipality within which any local board of health bringing suit shall have jurisdiction; and the clerk of the district court with whom any such complaint shall be filed, upon the order of the judge thereof, and the justice of the peace, police justice or recorder with whom any such complaint shall be filed, is hereby authorized and required to issue process in the nature of a summons when the complaint is on information, and in other cases either in the nature of a summons or warrant, which process, when in the nature of a warrant, shall be returnable forthwith, and, when in the nature of a summons, shall be returnable in not less than five nor more than fifteen days; on the return of such process, or at any time to which the trial shall have been adjourned, the said court, justice of the peace, police justice or recorder shall proceed to hear the testimony of witnesses and the proofs in the case, and to determine and give judgment in the matter without the filing of any pleadings, and, if judgment shall be given in favor of the plaintiff, execution shall forthwith issue against the goods and chattels and person of the defendant or defendants for the amount of the penalty, with costs; the officers to serve and execute any process or execution, issued as aforesaid, shall be the constables

of the county, which service and execution, in the case of any process or execution issued out of a district court, shall be made in the same manner and under the same liabilities as other processes and executions issued out of said court are served and executed; the officers to serve and execute any process or execution issued by a justice of the peace, police justice or recorder shall be the constables of the county, which service and execution shall be made in the same manner and under the same liabilities as other processes and executions issued out of the courts for the trial of small causes; the costs recoverable in any case prosecuted in a district court shall be the same as in other cases prosecuted in said court, and in any case prosecuted before a justice of the peace, police justice or recorder they shall be the same as are allowed in cases prosecuted in the courts for the trial of small causes; the penalty recovered in any such action shall be paid to the plaintiff therein and applied by such plaintiff to any purpose for which it may be legally authorized to expend money.

4. The judge of the district court, justice of the peace, police justice or recorder before whom any case is prosecuted under the next preceding section of this act may adjourn the hearing thereof from time to time, not exceeding thirty days from the return day of the summons or warrant, and in any case where a warrant shall have been issued may require the defendant or defendants to enter into a bond with sufficient surety to the plaintiff in the penal sum of two hundred dollars, conditioned to appear at the time and place of the hearing or trial, and in default of such bond may commit the defendant or defendants to the common jail of the county, to be there detained until the hearing or trial of the complaint; and if the defendant or defendants shall fail to appear at the time and place to which the hearing or trial shall be so adjourned, the bond shall be delivered to the plaintiff, who may sue thereon and apply the moneys recovered in such suit to any purpose for which it may be legally authorized to expend money.

5. The conviction in prosecutions under the next preceding section of this act shall be in the following or similar form:

"State of New Jersey, county of ———, ss.: Be it remembered that on this ——— day of ———, A. D. 18—, at ———, in said county, C. D., defendant, was, by the district court of the city of T. [or, by me, E. F., justice of the peace, police justice or recorder of the city of ———, or as the case may be], con-

victed of violating the ——— section of 'An act to provide for the regulation and control of the slaughter of horses and the sale of horse flesh for food,' approved ———, 1899, in a summary proceeding at the suit of the local board of health of the township of A. [or as the case may be]; and further, that the witnesses in said proceeding who testified for the plaintiff were [name them], and the witnesses who testified for the defendant were [name them]; therefore, the said court [or justice of the peace, police justice or recorder, as the case may be] doth hereby give judgment that the plaintiff recover of the defendant one hundred dollars penalty and ——— dollars costs of this proceeding."

The said conviction shall be signed by the judge of the district court, justice of the peace, police justice or recorder before whom the conviction is had.

6. This act shall take effect immediately.

Approved March 24th, 1899.

Laws.

Following is a list of titles of bills having relation to public health, introduced during the legislative session of 1901:

SENATE BILLS—1901.

* No. 12, Mr. Cross. Making valid as evidence the records of marriages, births and deaths recorded in the Secretary of State's office.

* No. 29, Mr. Reed. Revision of the Epileptic Village law. Provides for the commitment of all epileptics in the various asylums to the State Epileptic Village, the State to pay the same proportion for these epileptics as is now paid for their maintenance. A regular commitment of these to the State Village is also provided.

No. 33, Mr. McCarter. Increases the powers of the State Sewerage Commission. When notice has been given to cities to cease polluting any stream and the work is not done within a certain time, the commission is empowered to devise plans for the sewerage of such cities. Provides for the full enforcement of the law.

No. 44, Mr. Francis. Exempts from the provisions of the State Sewerage act the ocean or any waters separating this State from another, unless potable; also, rivers where the tide rises and falls, provided the sewage is not more than ten miles distant from the Atlantic ocean.

No. 45, Mr. Hutchinson. An act to establish a State sanatorium for tubercular cases. The Governor, with the advice of the Senate, shall appoint six persons as a board of trustees, to serve without salary. The trustees shall procure offers of sites, with prices, and, upon the Governor's approval, may purchase

* These bills became laws.

ground and erect a sanatorium, the whole expenditure not to exceed \$50,000. The trustees shall have control of the institution, framing rules, appointing medical help, nurses, &c.

No. 49, Mr. McKee. Forbids the employment of bakers for more than sixty hours per week or ten hours per day, unless for the purpose of making a shorter work-day on Saturday. Board of Health Inspectors and Factory Inspectors shall inspect all bakeries and see that this provision is carried out.

No. 50, Mr. McKee. Supplement to the act concerning disorderly persons.

* No. 51, Mr. Hudspeth (by request). Supplement to the Rural Cemetery act.

* No. 55, Mr. McCarter. Makes valid a joint contract between two or more municipalities for the joint construction and maintenance of an outlet or trunk sewer, notwithstanding that public notice shall not have been given of the intention to make such improvement.

* No. 63, Mr. Cross. Provides a secretary or clerk to local boards of health in all municipalities to prepare the annual report of such boards to the State Board; compensation to be \$2 for such clerical services.

No. 71, Mr. Wakelee. Prohibits the location of more than one cemetery in any one borough of less than 2,000 inhabitants and an area of one square mile.

No. 94, Mr. Reed. Provides for the appointment of a State Board of five Examiners of Sanitary Inspectors.

* No. 95, Mr. Reed. Concerning the data necessary to the certificates filed when dead human bodies are transported across the State.

No. 100, Mr. McCarter. Authorizes the appointment and defines the powers and duties of commissioners in sewerage and drainage districts created to relieve and prevent the pollution of streams and rivers. Refers to the appointment of local commissions and in pursuance of the General Sewerage act of last winter.

No. 102, Mr. McCarter. Incorporates the Lower Passaic Sewerage and Drainage district, the latter to comprise Passaic, Bergen, Hudson and Essex counties, and endowing it with all the powers, privileges and franchises which are or may be conferred

* These bills became laws.

upon such district for the purpose of relieving rivers and streams therein from pollution.

* No. 171, Mr. Cross. Permits towns and townships to construct a system of sewerage or drainage, and gives the governing body authority to issue bonds, where such improvements have been commenced before the incorporation of such town or township.

* No. 190, Mr. Cross. Amends the act regulating the practice of dentistry in the State. Applicants for examination must have a preliminary education equivalent to graduation from a four-year course in the high school. Decreases the fee required to be paid by an applicant for a license, who shall furnish satisfactory proof that he is a bona fide dentist, from \$50 to \$25. Requires the State Board to make an annual report to the New Jersey State Dental Society as well as to the Governor.

ASSEMBLY BILLS—1901.

No. 3, Mr. Marks. Provides that any person, other than duly licensed and practicing physicians, who has in his possession any narcotic or anæsthetic substance which will produce stupor or unconsciousness, with intent to use the same upon any person, unless by directions of a duly licensed physician, shall be guilty of a misdemeanor and subject to a term of from one to five years' imprisonment, and from \$1,000 to \$5,000 fine.

No. 11, Mr. Fallon. Pure food bill. Penalty for adulterating any article or compound intended to be used for food shall, upon conviction, be from \$2,500 to \$10,000 fine, and imprisonment of from one to three years.

No. 41, Mr. Waite. Provides that all persons selling poisons in less than five-grain quantities shall register name and residence of purchaser, name and quantity of poison and purpose for which sold.

No. 56, Mr. Tillotson. Makes it unlawful to allow any deleterious or poisonous substance to be turned or allowed to run or lay in any of the waters of the Hackensack river, or any of its tributaries.

* No. 61, Mr. Marks. Authorizes cities to establish and maintain free public baths and gymnasiums.

* These bills became laws.

No. 77, Mr. Fallon. A pure food bill.

No. 80, Mr. Fallon. Forbids the use of arsenic, calomel, &c., in any food preparations.

* No. 93, Mr. Lewis. An act to secure the purity of foods, beverages, confectionery, condiments, drugs and medicines, and to prevent deception in the distribution and sale thereof.

No. 125, Mr. Williams. Provides for the appointment of a commission of five to inquire into the advisability of acquiring by the State of a pure supply of potable waters, and the distribution of the same. No salaries, but \$1,000 for expenses.

No. 147, Mr. Gill. Amends the act relative to the transportation of dead human bodies.

* No. 148, Mr. Boyd. Enables cemetery associations to convey to churches and religious corporations free from all restrictions.

No. 166, Mr. Davidson. Provides against overcrowding of tenement houses and requires that there be not less than 300 cubic feet of air to each adult and 150 cubic feet of air to each child under twelve years of age.

No. 182, Mr. Keasler. Permits boroughs to establish sewage disposal works inside their limits, and gives them the right to cross lands with their pipes.

No. 183, Mr. Davidson. Increases the powers of local boards of health so that they can examine and license plumbers.

* No. 216, Mr. Fallon. Provides for the sewerage of the lowlands and flats in Hoboken.

* No. 223, Mr. Horner. Creates the township of Tabernacle, Burlington county.

No. 228, Mr. Lewis. Gives to county physicians, where there is such official, charge of dead bodies, instead of coroner.

No. 254, Mr. Williams. Gives local boards of health power to file bills in chancery to abate nuisances.

No. 313, Mr. Waite. Prevents manufacture or sale of adulterated food products.

No. 375, Mr. Blackwell. Supplement to an act incorporating rural cemeteries.

No. 377, Mr. Roe. Changes the name of the borough of Decker-town to that of the "Borough of Sussex."

*These bills became laws

No. 378, Mr. Fleming. Authorizes the State and local boards of health through their proper officers to visit and inspect the sanitary arrangements and conditions of all barber shops and to observe the methods used by barbers to prevent the spread of infectious or contagious diseases. The Governor shall appoint five practicing barbers, sixty days after passage of the act, who shall constitute a State Board of Barbers. The term of one such shall expire every year and the successor shall be appointed for five years, which will thereafter constitute a term. Board shall elect a president, secretary and treasurer from their members, and all serve without salary, upon payment of traveling and necessary expenses; and secretary to receive \$500 salary. Board shall examine and license all persons in their opinion qualified to become barbers, and license fee shall be \$10 per year. Every barber must register his name and address with the board. Anyone practicing as a barber without registering or being licensed shall be, upon conviction, fined from \$50 to \$100 or three months' imprisonment, or both. Act does not apply to apprentices, who must serve three years as such.

REPORT
OF THE
BUREAU OF VITAL STATISTICS
OF THE
STATE OF NEW JERSEY
FOR THE
STATISTICAL YEAR ENDING JUNE 30,
1901.

1

Number of Marriages, Births and Deaths,

By Counties, Cities, Boroughs and Townships, and Totals for
the State, for the Year Ending June 30th, 1901.

ATLANTIC COUNTY.

	M.	B.	D.
Absecon	8	10	5
Atlantic City	876	488	522
Buena Vista	19	42	88
Brigantine	1		
Egg Harbor City	17	58	47
Egg Harbor Township	8	24	42
Galloway	11	42	84
Hamilton	8	40	28
Hammononton	86	88	46
Linwood Borough	5	6	5
Mullica	2	15	11
Pleasantville Borough	24	44	29
Somers Point Borough	2	5	2
South Atlantic City		1	
Weymouth	2	9	1
	94		
	528	857	799

* Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

BERGEN COUNTY.

	M.	B.	D.
Allendale Borough.....	4	11	11
Bergen.....	1	8	6
Bergenfield Borough.....	3	15	9
Bogota Borough.....	.....	.....	8
Carlstadt Borough.....	12	65	43
Cliffside Park Borough.....	3	12	18
Cresskill Borough.....	1	8	7
Delford Borough.....	1	18	9
Dumont Borough.....	2	11	7
East Rutherford Borough.....	17	56	40
Edgewater Borough.....	5	18	15
Englewood City.....	36	75	84
Englewood Cliffs Borough.....	1	.....	1
Fairview Borough.....	5	26	11
Franklin.....	12	27	23
Garfield Borough.....	16	79	56
Glen Rock Borough.....	2	6	8
Hackensack City.....	82	203	167
Harrington.....	20	62	46
Hasbrouck Heights Borough.....	5	20	15
Hillsdale.....	9	8	14
Hohokus.....	11	37	58
Leonia Borough.....	3	10	6
Little Ferry Borough.....	.....	34	16
Lodi Borough.....	13	64	30
Lodi Township.....	3	10	8
Maywood Borough.....	.....	20	8
Midland.....	6	22	37
Midland Park Borough.....	7	13	6
Montvale Borough.....	1	7	3
North Arlington Borough.....	.....	1	3
Old Tappan Borough.....	1	6	4
Orvil.....	11	18	9
Overpeck.....	11	20	22
Palisade.....	3	14	19
Palisade Park Borough.....	7	19	18
Park Ridge Borough.....	4	26	21
Ridgefield Borough.....	3	2	3
Ridgefield Township.....	12	36	43
Ridgewood.....	21	25	40
Riverside Borough.....	5	4	8
Rutherford Borough.....	24	43	50
Saddle River Borough.....	3	6	5
Saddle River Township.....	2	32	15
Teaneck.....	3	7	5
Tenafly Borough.....	7	19	26
Union.....	2	16	26
Upper Saddle River Borough.....	.....	1	1
Wallington Borough.....	1	.....	1
Washington Township.....	2	12	9
Westwood Borough.....	.....	9	14
Wood Cliff Borough.....	.....	6	8
Wood Ridge Borough.....	3	16	14
	406	1,288	1,137

BURLINGTON COUNTY.

	M.	B.	D.
Bass River.....	8	15	8
Beverly.....	24	26	75
Bordentown.....	62	59	76
Burlington City.....	22	48	183
Burlington Township.....		2	8
Chester.....	81	86	65
Chesterfield.....	8	14	10
Cinnaminson.....	6	29	16
Delran.....	6	19	11
Eastampton.....		6	7
Evesham.....	4	25	22
Fieldsboro.....	2	7	7
Florence.....	12	40	29
Lumberton.....	10	15	13
Mansfield.....	6	13	21
Medford.....	16	20	29
Mount Laurel.....	8	81	25
New Hanover.....	16	16	22
Northampton.....	58	89	100
Palmyra.....	20	80	36
Pemberton Borough.....	25	15	13
Pemberton Township.....	6	16	52
Riverside.....	28	76	38
Riverton Borough.....	4	11	9
Shamong.....	2		9
Southampton.....	6	4	12
Springfield.....	5	10	19
Washington.....	4	12	10
Westampton.....		2	6
Willingsboro.....	2	5	12
Woodland.....	1	8	4
	887	749	892

CAMDEN COUNTY.

	M.	B.	D.
Camden City.....	1,275	1,206	1,869
Centre.....	5	27	35
Chesilhurst Borough.....		1	5
Collingswood Borough.....	8	17	12
Delaware.....		21	16
Gloucester City.....	45	186	185
Gloucester Township.....	19	73	82
Haddon Township.....	7	28	20
Haddonfield Borough.....	81	84	35
Merchantville Borough.....	21	18	41
Pensauken.....	6	81	87
Stockton Township.....		2	
Voorhees.....	1	14	8
Waterford.....	20	56	89
Winslow.....	9	87	82
	*8 1,445	1,701	1,914

* Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

REPORT OF VITAL STATISTICS.

CAPE MAY COUNTY.

	M.	B.	D.
Anglesea Borough.....	1	2	1
Avalon Borough.....			1
Cape May City.....	28	88	87
Cape May Point Borough.....			
Dennis.....	16	42	24
Holly Beach Borough.....	2	10	11
Lower.....	14	20	27
Middle.....	20	24	88
Ocean City Borough.....	12	19	24
Sea Isle City Borough.....	4	8	4
Upper.....	10	17	16
West Cape May Borough.....	1	18	8
Wildwood Borough.....			1
	108	188	192

CUMBERLAND COUNTY.

	M.	B.	D.
Bridgeton.....	110	278	207
Commercial.....	25	48	17
Deerfield.....	19	62	26
Downe.....	7	6	16
Fairfield.....	16	16	18
Greenwich.....	10	84	24
Hopewell.....	15	21	25
Landis.....	6	58	69
Lawrence.....	10	21	18
Maurice River.....	18	20	14
Millville City.....	148	276	140
Stow Creek.....	2	10	8
Vineland Borough.....	59	100	82
	*1		
	441	940	659

ESSEX COUNTY.

	M.	B.	D.
Belleville.....	26	68	117
Bloomfield.....	61	145	186
Caldwell Borough.....	5	20	19
Caldwell Township.....	2	28	15
Clinton Township.....	89	92	81
East Orange.....	188	824	221
Franklin.....	7	42	89
Glen Ridge Borough.....	7	28	22
Livingston.....	7	4	5
Millburn.....	9	40	81
Montclair City.....	73	304	248
Newark.....	2,575	6,064	4,615
North Caldwell Borough.....			4
Orange.....	125	576	418
South Orange Borough.....	24	77	44
South Orange Township.....	4	15	6
Vailsburg Borough.....	7	41	87
Verona.....	3	20	22
West Orange.....	20	182	90
	8,125	8,010	6,165

* Marriage certificate received from County Clerk in which the place where the marriage was performed is not stated.

GLOUCESTER COUNTY.

	M.	B.	D.
Clayton Borough.....	22	37	29
Deptford.....	4	22	11
East Greenwich	13	23	29
Elk	6	16	8
Franklin	17	30	33
Glassboro.....	26	67	41
Greenwich.....	12	33	47
Harrison	4	16	20
Logan	3	24	22
Mantua	9	23	20
Monroe.....	22	11	33
South Harrison.....	9	10	6
Washington.....	1	13	33
Wenonah Borough.....	2	1	4
West Deptford.....	7	35	26
Woodbury	42	76	64
Woolwich	16	40	31
	*1		
	216	482	456

* Marriage certificate received from County Clerk in which the place where the marriage was performed is not stated.

HUDSON COUNTY.

	M.	B.	D.
Bayonne City.....	223	1,064	509
East Newark Borough.....	5	35	47
Guttenberg.....	21	122	69
Harrison City.....	50	205	229
Hoboken City.....	762	1,491	1,161
Jersey City.....	1,888	3,895	3,970
Kearny.....	58	204	202
North Bergen.....	43	203	325
Secaucus Borough.....		18	
Town of Union.....	170	841	223
Weehawken.....	20	81	110
West Hoboken.....	216	581	345
West New York Borough.....	29	186	70
	*4		
	3,439	8,371	7,263

* Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

CAPE MAY COUNTY.

	M.	B.	
Anglesea Borough.....	4	16	
Avalon Borough.....	7	13	
Cape May City.....	6	8	
Cape May Point Borough.....	14	36	
Dennis.....	19	5	
Holly Beach Borough.....	4	9	
Lower.....	9	10	
Middle.....	6	10	
Ocean City Borough.....	14	22	
Sea Isle City Borough.....	15	17	
Upper.....	4	18	
West Cape May Borough.....	2	23	
Wildwood Borough.....	29	73	
	18	33	
	18	43	
	17	33	
	2	3	
	14	25	
	11	22	
	4	3	
	217	422	454

MERCER COUNTY.

	M.	B.	D.
Bridgeton.....			
Commercial.....			
Deerfield.....			
Downe.....			
Fairfield.....			
Greenwich.....			
Hopewell.....	3		15
Landis.....	2	5	12
Lawrence.....	21	17	51
Maurice.....	11	7	16
Millville.....	20	13	20
Stow C.....	6	21	20
Vine.....	3	15	23
	7	1	11
	25	69	64
		7	10
	673	646	1,165
	5	6	17
		10	12
	776	817	1,436

MIDDLESEX COUNTY.

	M.	B.	D.
Cranbury.....	15	21	14
Dunellen Borough.....	3	17	13
East Brunswick.....	13	17	30
Helmetta Borough.....	2	1	
Jamesburg Borough.....	11	4	3
Madison.....	1	21	10
Metuchen Borough.....	23	30	36
Milltown Borough.....	4	14	8
Monroe.....	3	9	10
New Brunswick City.....	202	336	364
North Brunswick.....	5	9	7
Perth Amboy City.....	201	401	306
Piscataway.....	14	30	42
Raritan.....	8	24	28
Sayreville.....	40	133	49
South Amboy City.....	33	141	90
South Amboy Township.....			1
South Brunswick.....	12	36	43
South River Borough.....	15	30	41
Woodbridge.....	19	159	139
	623	1,433	1,234

HUNTERDON COUNTY.

	M.	B.	D.
Alexandria.....	4	16	21
Bethlehem.....	7	13	26
Clinton Borough.....	6	8	8
Clinton Township.....	14	36	29
Delaware.....	19	5	27
East Amwell.....	4	9	20
Franklin.....	9	10	14
Frenchtown Borough.....	6	10	16
High Bridge Borough.....	14	22	21
Holland.....	15	17	28
Junction Borough.....	4	18	13
Kingwood.....	2	28	7
Lambertville.....	29	73	62
Lebanon.....	18	33	27
Raritan.....	18	43	51
Readington.....	17	33	33
Stockton Borough.....	2	3	7
Tewksbury.....	14	25	19
Union.....	11	22	10
West Amwell.....	4	3	13
	217	422	454

MERCER COUNTY.

	M.	B.	D.
East Windsor.....	3	.....	15
Ewing.....	2	5	12
Hamilton.....	21	17	51
Highstown Borough.....	11	7	16
Hopewell Borough.....	20	13	20
Hopewell Township.....	6	21	20
Lawrence.....	3	15	23
Pennington Borough.....	7	1	11
Princeton Borough.....	25	69	64
Princeton Township.....	.....	7	10
Trenton.....	673	646	1,165
Washington.....	5	6	17
West Windsor.....	.....	10	12
	776	817	1,436

MIDDLESEX COUNTY.

	M.	B.	D.
Cranbury.....	15	21	14
Dunellen Borough.....	3	17	13
East Brunswick.....	13	17	30
Helmetta Borough.....	2	1	.....
Jamesburg Borough.....	11	4	3
Madison.....	1	21	10
Metuchen Borough.....	23	30	36
Milltown Borough.....	4	14	8
Monroe.....	3	9	10
New Brunswick City.....	202	336	364
North Brunswick.....	5	9	7
Perth Amboy City.....	201	401	306
Piscataway.....	14	30	42
Raritan.....	8	24	28
Sayreville.....	40	133	49
South Amboy City.....	38	141	90
South Amboy Township.....	.....	.....	1
South Brunswick.....	12	36	43
South River Borough.....	15	80	41
Woodbridge.....	19	159	139
	629	1,483	1,234

MARRIAGES, BIRTHS AND DEATHS.

409

MONMOUTH COUNTY.

	M.	B.	D.
Allenhurst Borough.....		4	8
Allentown Borough.....	7		7
Asbury Park.....	59	36	60
Atlantic.....	3	6	12
Atlantic Highlands.....	1	3	8
Belmar Borough.....	20	19	16
Bradley Beach Borough.....	16	8	17
Deal Borough.....			4
Eatontown.....	10	82	43
Englishtown Borough.....	4	7	6
Freehold.....	43	82	80
Highlands Borough.....		9	2
Holmdel.....	9	13	21
Howell.....	29	43	51
Long Branch.....	78	111	188
Manalapan.....	9	12	22
Manasquan Borough.....	14	11	14
Marlboro.....	4	4	21
Matawan Borough.....	15	24	23
Matawan Township.....	2	5	16
Middletown.....	25	75	80
Millstone.....	2	13	18
Neptune.....	68	106	155
Neptune City Borough.....		4	5
North Spring Lake Borough.....	1	3	2
Ocean.....	3	31	25
Raritan.....	43	92	108
Red Bank Borough.....	55	53	38
Sea Bright Borough.....	6	5	6
Shrewsbury.....	17	56	99
Spring Lake Borough.....		2	3
Upper Freehold.....	10	24	21
Wall.....	17	37	37
	*2		
	572	940	1,251

MORRIS COUNTY.

	M.	B.	D.
Boonton.....	33	49	59
Chatham Borough.....	5	32	17
Chatham Township.....		9	10
Chester.....		13	23
Dover City.....	66	96	89
Florham Park Borough.....		6	8
Hanover.....	19	38	207
Jefferson.....	8	1	16
Madison Borough.....	21	55	47
Mendham.....	6	32	11
Montville.....	4	7	21
Morristown.....	72	175	210
Morris Township.....		20	14
Mount Arlington.....	2	5	6
Mount Olive.....	3	19	19
Netcong.....	2	5	15
Passaic.....	11	14	28
Pegannock.....	18	52	47
Port Oram Borough.....	11	45	25
Randolph.....	8	12	34
Rockaway Borough.....	19	26	20
Rockaway Township.....	4	52	60
Roxbury.....	28	46	40
Washington.....	11	36	14
	365	845	1,040

* Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

OCEAN COUNTY.

	M.	B.	D.
Bay Head Borough.....		2	1
Beach Haven Borough.....			9
Berkeley.....	1	18	16
Brick.....	7	85	81
Dover.....	82	41	48
Eagleswood.....	14		8
Island Heights Borough.....	8		2
Jackson.....	7	12	12
Lacey.....	7	11	10
Lakewood.....	40	68	52
Lavallette Borough.....			
Little Egg Harbor.....	7	28	29
Long Beach Township.....		2	1
Manchester.....	8	5	19
Ocean.....	5	12	8
Plumsted.....	11	15	17
Point Pleasant Beach Borough.....	8	26	14
Stafford.....	1	17	17
Tuckerton Borough.....	7	12	
Union.....	18	21	16
	166	820	810

PASSAIC COUNTY.

	M.	B.	D.
Acquackanonk.....	20	52	54
Hawthorne Borough.....	8	20	17
Little Falls.....	9	62	87
Manchester.....	12	91	46
Passaic City.....	595	971	588
Paterson.....	887	1,940	1,816
Pompton.....	14	81	86
Pompton Lake Borough.....	5	8	2
Prospect Park Borough.....			
Totowa Borough.....	1	5	7
Wayne.....	10	18	21
West Milford.....	20	22	28
	*1		
	1,527	3,220	2,647

SALEM COUNTY.

	M.	B.	D.
Alloway.....	18	25	28
Elmer Borough.....	11	15	18
Elsinboro.....		8	6
Lower Alloways Creek.....	8	14	15
Lower Penns Neck.....	9	14	14
Mannington.....	9	11	28
Oldmans.....	8	37	22
Penns Grove Borough.....	19	49	24
Pilesgrove.....	2	27	28
Pittsgrove.....	1	18	24
Quinton.....	13	27	12
Salem City.....	67	66	88
Upper Penns Neck.....		14	6
Upper Pittsgrove.....	18	30	17
Woodstown Borough.....	21	14	17
	199	354	332

* Marriage certificate received from County Clerk in which the place where the marriage was performed is not stated.

MARRIAGES, BIRTHS AND DEATHS.

411

SOMERSET COUNTY.

	M.	B.	D.
Bedminster	6	88	82
Bernards	19	48	38
Bound Brook Borough	22	72	34
Branchburg	5	17	10
Bridgewater	64	83	88
Franklin	11	48	57
Hillsborough	23	27	32
Millstone Borough			
Montgomery	6	7	10
North Plainfield Borough	54	88	61
North Plainfield Township	1	8	1
Raritan Borough	19	29	45
Warren	4	8	10
	284	468	418

SUSSEX COUNTY.

	M.	B.	D.
Andover	4	16	11
Branchville Borough	7	6	6
Brooklyn Borough	1		
Byram	10	14	19
Deckertown Borough	8	4	18
Frankford	1	13	20
Green	3	4	7
Hampton	10	7	7
Hardyston	21	87	85
Lafayette	8	9	10
Montague	4	3	5
Newton	34	66	41
Sandyston	8	4	6
Sparta	16	28	34
Stillwater	9	12	10
Vernon	7	23	16
Walpack	1	4	1
Wantage	13	15	28
	165	265	272

UNION COUNTY.

	M.	B.	D.
Clark		8	
Cranford	13	38	44
Elizabeth City	811	823	956
Fanwood Borough	1	8	3
Fanwood Township	8	4	14
Linden Borough	2	7	4
Linden Township	2	5	9
Mountain Side Borough		3	1
New Providence Borough	7	7	3
New Providence Township	2	9	5
Plainfield	118	297	280
Rahway	74	142	112
Roselle Borough	14	22	16
Springfield	9	22	15
Summit City	27	116	68
Union	7	22	36
Westfield	31	38	74
	626	1,616	1,640

WARREN COUNTY.

	M.	B.	D.
Allamuchy.....		2	1
Belvidere.....	18	21	22
Blairstown.....	5	7	17
Franklin.....	8	16	22
Frelinghuysen.....	7	7	7
Greenwich.....	13	14	19
Hackettstown.....	21	28	32
Hardwick.....		1	5
Harmony.....	7	18	18
Hope.....	9	18	16
Independence.....	10	7	15
Knowlton.....	18	18	18
Lopatcong.....	2	80	14
Mansfield.....	20	11	25
Oxford.....	10	57	56
Pahaquarry.....	1	2	2
Phillipsburg.....	120	185	152
Pohatcong.....	17	24	27
Washington Borough.....	25	49	57
Washington Township.....	6	8	17
	312	468	587

SUMMARY.

	M.	B.	D.
Atlantic.....	528	857	799
Bergen.....	406	1,288	1,187
Burlington.....	887	749	892
Camden.....	1,445	1,701	1,914
Cape May.....	108	188	192
Cumberland.....	441	940	659
Essex.....	8,125	8,010	6,165
Gloucester.....	216	482	456
Hudson.....	8,489	8,871	7,268
Hunterdon.....	217	422	454
Mercer.....	776	817	1,436
Middlesex.....	629	1,488	1,284
Monmouth.....	572	940	1,251
Morris.....	365	845	1,040
Ocean.....	166	820	810
Passaic.....	1,527	3,220	2,647
Salem.....	199	354	332
Somerset.....	284	468	418
Sussex.....	165	265	272
Union.....	626	1,616	1,640
Warren.....	812	468	587
	15,873	33,804	31,048

MORTALITY TABLES.

413

Return of Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

COUNTIES. Statistical Divisions.	DEATHS AT ALL AGES.										Death-rate per 1,000. without cities of over 5,000.	Deaths under 5, in each 100, or comparison of these with total deaths.	Number of deaths from chief prevent- able diseases.	Comparative number of deaths in each 100 from chief prevent- able diseases.
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Undefined.	Total, including undefined.						
								Estimated population for 1901.	Death-rate per 1,000.					
Atlantic	53	121	95	43	261	223	2	799	48,732	16.40	14.59	33.67	220	27.53
Bergen	82	196	94	73	328	257	7	1,137	81,079	14.02	13.68	32.72	309	27.18
Burlington	51	97	58	74	234	372	6	892	55,241	15.32	14.61	23.09	223	25.56
Camden	141	314	201	184	602	468	4	1,914	109,151	17.54	15.15	34.27	578	30.20
Cape May	12	21	14	13	58	72	2	192	15,270	14.47	14.47	24.48	51	26.56
Cumberland	41	88	44	48	169	271	.....	659	51,469	12.90	11.63	25.94	168	25.49
Essex	412	1,019	565	382	2,358	1,422	7	6,165	368,464	16.73	12.08	32.38	1,772	28.74
Gloucester	35	49	29	27	143	172	1	486	32,048	14.23	14.23	24.78	122	26.75
Hudson	516	1,293	811	521	2,818	1,285	19	7,253	397,642	18.27	18.06	36.07	2,235	30.77
Hunterdon	27	40	15	22	108	240	2	454	34,507	13.16	13.16	18.06	85	18.72
Mercer	100	195	94	84	542	405	13	1,436	97,380	14.75	12.39	27.30	346	24.10
Middlesex	103	236	85	85	405	316	4	1,244	81,703	15.10	12.97	34.36	355	28.77
Monmouth	64	225	90	76	381	333	26	1,251	83,360	15.01	14.33	30.78	389	31.95
Morris	64	98	60	66	370	379	3	1,040	66,280	15.69	15.22	21.35	225	21.73
Ocean	19	51	22	19	79	120	.....	310	19,949	15.54	15.54	28.67	73	23.55
Passaic	244	533	271	198	857	589	5	2,647	159,597	16.59	10.73	30.59	849	32.07
Salem	28	51	23	22	92	114	2	382	25,419	13.06	12.70	30.72	100	30.12
Somerset	25	54	26	29	120	163	1	418	33,448	12.60	12.50	25.32	110	26.32
Sussex	15	37	14	12	76	115	3	272	24,444	11.13	11.13	24.26	52	19.12
Union	119	286	148	112	568	403	4	1,640	102,143	16.06	11.82	33.72	486	23.54
Warren	30	99	53	37	133	232	11	587	37,881	14.18	13.93	23.09	115	21.42
Total	2,181	5,064	2,800	2,127	10,702	8,051	123	31,048	1,928,157	16.12	13.85	32.35	8,989	28.57

REPORT OF VITAL STATISTICS.

Return of Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

DEATHS FROM THE MORE COMMON CAUSES.																								
COUNTIES. Statistical Divisions.		Remittent fever, etc.	Typhoid fever.	Small-pox.	Scarlet fever.	Measles.	Whooping cough.	Croup and diphtheria.	Krysipelas.	Diarrheal dis- eases.	Consumption— males.	Consumption— females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and uri- nary diseases.	Spinal diseases.	Adult brain and spinal diseases.	Digestive and in- testinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undefined.
Atlantic.....		1	6	.....	3	2	9	33	1	94	37	34	99	38	84	78	77	47	21	3	2	50	32
Bergen.....		5	12	1	6	1	14	25	1	146	52	46	100	61	96	65	127	58	39	2	9	81	46	
Burlington.....		1	21	1	6	.....	5	20	3	82	40	49	121	25	103	71	114	48	27	3	6	47	48
Camden.....		2	21	12	5	3	4	122	5	202	102	109	255	120	206	126	156	64	56	3	13	91	85	
Cape May.....		1	4	.....	3	.....	.....	.....	7	8	7	16	9	22	9	20	18	5	.....	.....	2	11	17
Cumberland.....		1	11	.....	6	2	4	8	1	71	32	32	86	26	70	48	95	32	28	3	4	22	39
Essex.....		12	76	8	27	12	36	137	13	622	474	335	878	353	549	495	511	334	202	6	61	335	255	
Gloucester.....		4	9	1	6	3	1	13	.....	29	33	23	53	18	47	29	62	25	11	1	2	31	20
Hudson.....		18	77	8	52	18	27	233	16	847	551	388	1,076	503	515	476	532	396	203	11	61	475	274	
Hunterdon.....		3	2	.....	.....	.....	1	8	.....	24	25	22	61	14	63	32	65	31	20	2	5	20	29
Mercer.....		4	17	.....	1	1	10	15	4	116	100	78	187	70	182	85	193	83	44	2	22	87	65
Middlesex.....		7	15	.....	2	1	8	21	3	169	67	62	160	54	124	84	104	57	31	3	16	93	50
Monmouth.....		4	27	.....	6	3	9	18	4	184	69	75	114	86	128	93	125	80	51	3	10	79	57
Morris.....		3	10	.....	4	2	8	18	3	81	45	52	104	28	106	60	246	64	40	4	9	58	36
Ocean.....		1	2	.....	4	.....	5	4	1	27	20	13	51	16	30	16	41	24	11	2	1	8	18
Passaic.....		13	33	2	13	7	17	57	5	401	189	162	371	161	202	139	177	124	95	2	26	156	101	
Salem.....		2	.....	.....	2	.....	2	2	.....	39	22	30	47	18	30	19	32	12	14	1	5	14	15
Somerset.....		1	3	.....	5	8	2	11	1	36	24	24	52	12	52	28	58	19	13	.....	8	30	21
Sussex.....		2	1	.....	1	.....	.....	3	.....	26	9	10	46	8	36	15	31	19	10	1	7	7	25
Union.....		4	20	.....	6	2	11	54	5	197	105	82	231	81	127	134	117	80	59	1	13	109	83
Warren.....		1	8	.....	.....	.....	1	9	.....	52	16	28	69	16	69	39	70	47	19	.....	2	33	28
Total.....		90	875	82	155	60	173	834	69	3,469	1,960	1,652	4,237	1,684	2,810	2,133	2,947	1,682	1,001	55	209	1,834	1,346	

Under the heading "Number of deaths from chief preventable diseases," the first ten diseases are classified, including consumption (male and female). Of those dying under one year, 2,181 died under one month, of which 1,611 died in the large cities. Of the 10,045 that died under five years, 7,147 died in the large cities. Total death-rate for consumption for the State as compared with total deaths, 11.63, the deaths being in the cities 2,588—1,061 outside. Rates for short periods, or which deal with small numbers, do not eliminate or balance errors which practically disappear in large aggregates. The number of deaths before twenty in proportion to the remainder, is much more informative concerning local causes affecting health than total deaths. The death-rate for the present year is based upon the estimated population.

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TABLE 25.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

CITIES.	DEATHS AT ALL AGES.										Estimated population for 1901.	Deaths under 5, in each 1,000.	Deaths under 5, in each 100, of total deaths.	Number of deaths from chief prevent-able diseases.	Comparative number of deaths in each 100, from chief prevent-able diseases.
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Undefined.	Total, including undeclared.							
Atlantic County—															
Atlantic City.....	31	82	57	27	206	116	3	322	29,740	17.55	32.57	136	26.05	27.38	21.56
Bergen County—															
Englewood.....	5	14	4	5	34	22	.....	84	6,417	13.09	27.38	23	27.38	27.38	21.56
Hackensack.....	16	18	16	10	54	51	2	167	9,576	16.91	29.94	36	21.56	27.38	21.56
Burlington County—															
Burlington.....	5	10	8	6	28	23	1	76	4,110	18.40	23.63	21	27.63	27.63	21.56
Burlington.....	11	14	8	10	36	53	1	133	7,322	17.99	24.81	35	26.32	26.32	21.56
Camden County—															
Camden.....	108	243	171	152	415	279	1	1,369	78,429	17.46	33.13	431	31.48	31.48	27.57
Gloucester City.....	12	25	5	11	73	59	.....	185	6,963	26.60	22.70	51	27.57	27.57	21.56
Cumberland County—															
Bridgeton.....	15	31	15	17	48	81	.....	207	14,087	14.75	29.47	58	23.02	23.02	21.56
Millville.....	10	17	10	10	40	53	.....	140	10,606	13.20	26.43	33	23.57	23.57	21.56
Essex County—															
East Orange.....	18	26	22	17	62	86	.....	221	22,222	9.95	29.56	52	23.53	23.53	21.56
Montclair.....	17	79	15	10	63	89	.....	243	14,404	16.56	45.65	68	27.98	27.98	21.56
Newark.....	298	751	442	284	1,864	976	2	4,615	232,123	18.30	32.26	1,334	28.91	28.91	21.56
Orange.....	29	58	30	22	185	94	.....	418	24,411	17.12	27.99	122	29.19	29.19	21.56
Hudson County—															
Bayonne.....	43	128	74	36	162	66	.....	509	35,295	14.42	48.13	170	33.40	33.40	21.56
Harrison.....	16	55	21	28	81	29	1	229	10,781	21.24	40.17	67	29.26	29.26	21.56
Hoboken.....	79	179	117	75	501	208	5	1,164	60,420	19.27	32.22	362	31.10	31.10	21.56
Jersey City.....	288	680	438	279	1,591	704	12	3,970	211,177	18.50	34.86	1,175	29.60	29.60	21.56
Town of Union.....	12	37	33	16	71	49	.....	223	16,557	14.33	39.01	74	33.14	33.14	21.56
Mercer County—															
Trenton.....	83	174	86	70	463	245	5	1,165	76,465	15.44	29.44	288	24.72	24.72	21.56
Middlesex County—															
New Brunswick.....	18	52	20	27	133	113	1	364	20,025	18.18	24.73	89	24.45	24.45	21.56
Perth Amboy.....	28	87	87	21	84	48	1	306	18,633	16.42	49.67	104	34.03	34.03	21.56
South Amboy.....	6	20	4	7	37	16	.....	90	6,506	13.84	33.33	24	26.67	26.67	21.56
Monmouth County—															
Long Branch.....	10	26	11	14	76	45	6	188	9,190	20.46	25.00	47	25.00	25.00	21.56

REPORT OF VITAL STATISTICS.

TABLE 25.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901—Continued.

CITIES.	DEATHS AT ALL AGES.							Estimated population for 1901.	Death-rate per 1,000.	Deaths under 5, in each 100, of total deaths.	Number of deaths from chief preventable diseases.	Comparative number of deaths in each 100, from chief preventable diseases.
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Undeined.					
Morris County—												
Dover	11	11	10	5	20	32	89	6,121	14.54	35.96	27	30.34
Morristown	11	14	11	18	94	62	210	11,462	18.32	17.14	52	24.76
Passaic County—												
Passaic City	78	155	89	36	133	68	4	29,754	19.59	55.23	195	33.45
Fairson	142	335	190	145	645	388	1	106,786	17.01	35.08	594	32.71
Salem County—												
Salem City	9	14	5	5	29	19	2	5,811	14.28	33.73	26	31.33
Union County—												
Union City	71	180	107	69	342	185	2	53,789	17.78	37.45	310	32.43
Plainfield	10	38	17	16	116	74	290	15,717	17.82	26.43	65	23.21
Rahway	5	19	6	6	27	40	112	7,935	14.11	26.79	20	17.86
Warren County—												
Phillipsburg	9	21	16	11	52	42	1	10,246	14.84	30.25	44	28.95
Total	1,511	3,573	2,063	1,463	7,773	4,434	52	1,191,338	17.52	34.25	6,133	26.39

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TABLE 25.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901—Continued.

CITIES.	DEATHS FROM THE MORE COMMON CAUSES.																					
	Remittent fever, etc.	Enteric or typhoid fever.	Small-pox.	Scarlet fever.	Measles.	Whooping cough.	Croup and diph- theria.	Erysipelas.	Diarrheal dis- eases.	Consumption— males.	Consumption— females.	Acute lung dis- eases.	Brain and nerv- ous diseases of children.	Diseases of heart and circulation.	Kidney and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal dis- eases.	Cancer.	Acute rheuma- tism.	Puerperal.	Violent deaths.	Undefined.
Atlantic County—																						
Atlantic City.....	1	3	.....	.....	1	7	11	.....	67	23	23	68	27	53	55	41	34	16	3	1	37	15
Bergen County.....																						
Englewood.....	1	3	.....	.....	.....	1	.....	.....	9	4	5	11	2	12	7	8	4	3	.....	.....	3	6
Hackensack.....	2	3	.....	.....	.....	4	2	.....	14	10	1	22	5	12	14	26	10	7	.....	1	16	2
Burlington County—																						
Bordentown.....	1	2	.....	.....	.....	.....	.....	.....	6	4	7	12	3	7	13	8	3	2	.....	.....	4	7
Burlington.....	1	6	.....	.....	.....	3	.....	1	6	4	7	12	3	7	17	13	18	2	.....	.....	7	6
Camden County—																						
Camden.....	2	9	.....	.....	5	2	4	115	3	155	70	68	180	96	129	96	55	42	2	11	72	66
Gloucester City.....	.....	11	.....	.....	.....	1	.....	.....	16	8	15	39	7	17	11	20	8	5	1	1	5	8
Cumberland County—																						
Camden.....	2	5	.....	.....	1	.....	.....	.....	17	10	9	29	5	18	18	33	11	3	1	2	3	6
Mt. Airy.....	.....	.....	.....	.....	.....	.....	.....	.....	14	4	9	21	7	18	8	16	6	.....	.....	.....	12	6
Mt. Airy.....	.....	.....	.....	.....	.....	.....	.....	.....	17	10	9	21	7	18	8	16	6	.....	.....	.....	12	6
Essex County—																						
East Orange.....	3	3	.....	.....	.....	3	.....	.....	19	9	12	36	13	27	15	21	15	6	.....	.....	5	13
Montclair.....	3	3	.....	.....	.....	2	.....	.....	49	3	9	30	14	18	11	23	15	9	1	6	5	28
Newark.....	9	69	7	18	9	31	123	10	431	386	251	616	290	409	391	368	246	145	6	46	269	179
Orange.....	1	5	.....	.....	1	2	.....	.....	42	39	27	80	14	32	33	34	22	12	1	7	21	11
Hudson County—																						
Bayonne.....	8	.....	.....	.....	.....	.....	.....	.....	84	29	21	100	42	25	28	22	12	18	2	5	30	12
Harrison.....	4	6	.....	.....	.....	1	.....	.....	34	6	14	33	11	14	10	8	7	.....	.....	.....	18	12
Hoboken.....	1	10	.....	.....	.....	2	.....	.....	125	119	60	143	69	106	56	90	67	3	.....	.....	8	12
Jersey City.....	10	42	1	23	9	31	123	7	410	315	221	567	284	297	280	279	250	111	8	28	242	161
Town of Union.....	1	1	7	.....	.....	1	.....	.....	26	12	8	32	15	9	22	15	13	8	.....	.....	5	12
Mercer County—																						
Camden.....	3	14	.....	.....	1	8	13	1	100	84	64	160	62	121	70	165	64	34	.....	.....	16	55
Middlesex County.....																						
New Brunswick.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Perth Amboy.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Amboy.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Monmouth County—																						
Long Branch.....	1	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 25.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901—Continued.

CITIES.	DEATHS FROM THE MORE COMMON CAUSES.																					
	Remittent fever, etc.	Enteric or typhoid fever.	Small-pox.	Scarlet fever.	Measles.	Whooping cough.	Croup and diphtheria.	Erysipelas.	Diarrheal diseases.	Consumption—Males.	Consumption—Females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undefined.
Morris County—	5	2	.....	2	1	3	4	.....	5	5	5	12	3	6	4	14	3	3	.....	1	2	3
Dover.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Morristown.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Passaic County—	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Passaic City.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Paterson.....	4	8	.....	2	6	3	9	2	123	18	20	100	37	32	22	25	24	13	1	5	34	17
Salem County—	8	24	2	5	1	14	43	3	246	115	130	241	105	144	107	127	86	72	1	18	106	73
Salem City.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Union County—	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elizabeth.....	1	7	.....	5	2	8	39	1	132	78	42	135	53	84	68	56	36	26	.....	1	2	7
Plainfield.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plainfield.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rahway.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Warren County—	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philipsburg.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	52	250	22	92	41	119	597	42	2,300	1,441	1,117	2,941	1,260	1,764	1,459	1,694	1,093	631	53	190	1,246	857

MORTALITY TABLES.

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TABLE 26.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

ATLANTIC COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.							DEATHS FROM THE MORE COMMON CAUSES.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Total, including undeined.	Estimated population.	Death-rate per 1,000.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
										Remittent fever, etc.	Enteric or typhoid fever.	Small-pox.	Scarlet fever.	Whooping cough.	Diphtheria and croup.	Diarrheal diseases of children.	Consumption—males.	Consumption—females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestional and In-testinal diseases.	Cancer.	Rheumatism.	Puerperal.	Violent deaths.	Undeined.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Alsecon.....	31	82	57	27	206	116	3	532	29,740	17.55	1	5	1	3	1	7	11	5	67	23	23	68	27	58	55	41	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

DEATHS FROM THE MORE COMMON CAUSES.

[illegible]

TABLE 28.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901—Continued.

BURLINGTON COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.							Estimated population, 1900	Death rate per 1,000.	DEATHS FROM THE MORE COMMON CAUSES.																						
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Total, including																									
							Undeined.			Undeined.																						
Shamong Township.....	1	1	1	2	4	9	9	.....	.....	Remittent fever, etc.	Enteric or typhoid fever.	Small-pox.	Scarlet fever.	Measles.	Whooping cough.	Diphtheria and croup.	Erysipelas.	Diarrheal diseases of children.	Consumption— males.	Consumption— females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adip brain and spinal diseases.	Digestive and in- testinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undeined.	
Southampton Township.....	4	4	1	1	1	12	12	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	1	1	1	1	1	1	1	1	1	1	
Springfield Township.....	2	1	1	1	1	10	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	1	1	1	1	1	1	1	1
Washington Township.....	1	2	1	3	.....	3	10	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	1	1	1	1	1	1	1	1
Westampton Township.....	.....	1	.....	.....	2	10	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Willingboro Township.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Woodland Township.....	.....	2	1	.....	.....	1	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	51	97	58	74	234	372	6	882	53,241	15.32	1	21	1	6	5	20	3	82	40	49	121	25	103	71	114	48	27	3	6	47	48	1

TABLE 29.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

CAMDEN COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.						Estimated population, 1900.	Death-rate per 1,000.	DEATHS FROM THE MORE COMMON CAUSES.																						
	Under one month.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Undefined.			Total, including undefined.	Remittent fever, etc.	Erythral fever.	Scarlet fever.	Males.	Whooping cough.	Diphtheria and croup.	Erysipelas.	Diarrheal diseases of children.	Consumption— males.	Consumption— females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and in- testinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undefined.	
Camden City	108	243	171	182	415	279	1,869	75,429	17.46	2	9	5	2	4	115	3	155	70	66	180	96	129	96	51	42	211	72	56			
Centre Township	4	4	6	2	13	10	35			3	3				2		3	4	5	4	1	7	1	1				2	3		
Chestnut Borough	1	1	1	1	1	1	6																								
Collingswood	1	1	1	2	5	4	12										2	1	1	1	1	1		2				2	1		
Delaware Township	12	25	5	11	73	99	185	6,963	26.57	1	11					1	16	8	15	39	7	17	11	20	5	1	5	8			
Gloucester City	1	9	2		31	39	82									4	9	6	6	6	3	16	2	17	4	3	1	2	7		
Gloucester Township	1	2	3		8	6	20			3	8					1	5	3	5	1	2	2	1	3	1		1	1			
Haddon Township	1	4	3	3	7	17	35			3	1					2	3	3	5	1	2	2	6	1	1		1	1			
Haddonfield Borough	4	2	2	1	15	16	41									2	2	1	4	2	11	1	4	3	1		1	5			
Merchantville Boro	3	8	4	5	9	8	37			1	1					2	3	1	3	6	6	1	2	1	2		1	1			
Pennsauken Township	3	3		2	1	2	8			1								1									1	3			
Voorthes Township																												1	1		
Waterford Township	5	5	6	2	6	13	39			1									7	1	6	4	2	6	2		1	1			
Winslow Township	4	5	1	2	12	8	32			1						1	6	1		2	3	7	5	3	2						
Totals	141	314	201	184	602	468	1,914	109,151	17.54	2	21	12	5	3	4	122	5	292	102	100	255	120	206	128	156	84	56	3	13	91	85

TABLE 30.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

CAPE MAY COUNTY, Statistical Divisions.	DEATHS AT ALL AGES.							Estimated population, 1900.	Death-rate per 1,000.	DEATHS FROM THE MORE COMMON CAUSES.																						
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Undefined.			Total, including undefined.	Remittent fever, &c.	Enteric or typhoid fever.	Small-pox.	Scarlet fever.	Measles.	Whooping cough.	Diphtheria and croup.	Erysipelas.	Diarrheal diseases of children.	Consumption— males.	Consumption— females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and in- testinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undefined.
Anglesea Borough.....						1		1																								
Avalon Borough.....						1		1																								
Cape May City.....	2	4	4	1	16	10	37	37		2								9			1					4						
Cape May Point Borough.....																																
Dennis Township.....	4	4	2		4	10	24	24					1					4	1	1	2				1							
Holly Beach Borough.....																																
Lower Township.....	3	4		1	8	11	27	27		1								2	2	1	4				1							
Middle Township.....	2	1	2	2	12	19	38	38																								
Ocean City Borough.....																																
Sea Isle City Borough.....	1	1					4	4																								
Upper Township.....																																
West Cape May Borough.....																																
Wildwood.....																																
Totals.....	12	21	14	13	58	72	2	192	13,270	14.47	1	4	3				3	1	24	8	7	16	9	23	9	20	18	5		2	11	17

REPORT OF VITAL STATISTICS.

TABLE 31.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

CUMBERLAND COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.							Estimated population.	Death-rate per 1,000.	DEATHS FROM THE MORE COMMON CAUSES.																							
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Undefined.			Total, including undefined.	Remittent fever, &c.	Typhoid fever.	Scarlet fever.	Measles.	Whooping cough.	Erysipelas.	Diarrheal diseases of children.	Consumption—males.	Consumption—females.	Acute lung disease.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undefined.			
Bridgeton.....	15	31	15	17	48	81	207	14,037	14.75	.....	5	1	.....	2	3	1	27	10	9	29	5	18	18	33	11	8	1	2	3	6		
Commercial.....	2	2	.....	.....	.....	7	6	17	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Deerfield	3	3	3	1	5	11	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Downe	1	.....	.....	.....	3	10	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fairfield.....	2	2	2	.....	4	10	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Greenwich	2	3	2	1	6	10	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hopewell	1	3	1	2	7	11	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Landis.....	5	5	2	7	20	27	69	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lawrence.....	.....	.....	.....	.....	5	7	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maurice River.....	.....	1	2	2	7	7	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Millville.....	10	17	10	10	40	53	140	10,606	13.20	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stow Creek.....	.....	.....	.....	.....	8	8	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vineland Borough.....	2	13	7	8	22	30	82	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	41	86	44	48	169	271	659	51,469	12.80	1	11	5	6	2	4	8	1	71	32	32	86	25	70	45	95	32	28	3	4	22	39

TABLE 32.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

ESSEX COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.							DEATHS FROM THE MORE COMMON CAUSES.																							
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Undefined.		Death-rate per 1,000.	Estimated population.	Remittent fever, etc.	Enteric or typhoid fever.	Small-pox.	Scarlet fever.	Whooping cough.	Diphtheria and croup.	Diarrheal diseases of children.	Consumption— males.	Consumption— females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and in- testinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undefined.		
						Over sixty.	Total, including undefined.																								
Belleville.....	15	27	15	5	36	21	2	117							1	7	21	7	11	13	5	5	4	7	3				5	5	
Bloomfield.....	7	23	13	12	37	40	1	136							3	1	21	10	7	14	8	16	7	12	4				8	10	
Caldwell Borough.....	1					0	19											1	1			1	3	4	1	1			2		
Caldwell Township.....	2		1	2	3	7	15										1			4	2	2		1	2				1		
Clinton.....	3	13	5	5	12	17	1	56							4	10	2	2	5	2	3	5	5	10	1	2			6		
East Orange.....	18	26	22	17	52	86	221	22,222	9.95		3	3	3		3	19	9	12	36	13	27	15	21	15	6				5	13	
Franklin.....	1	4	4		12	18		39		2	1					3	2	1	5		5	1	4	12	5	4			5	2	
Glen Ridge Borough.....	2	1	4		3	12		22							1			1		6	1	3	5	1	1	2			1		
Irrington.....	3	3	3	1	7	5	25										1	2		6		1	1	1	2				1		
Livingston.....			2		1	2	5								1	1										1			1	1	
Milburn.....	1	6	4		12	8	31										4	1	4	2	3	4	4	3	2				5	26	
Montclair.....	17	79	15	10	62	59	1	243	16.86		3				2	49	3	9	30	14	18	11	23	15	9	1	6	5			
Newark.....	295	751	442	284	1,564	976	2	4,615	18.30	9	39	7	18	9	31	123	10	385	231	646	280	409	391	368	246	145	6	46	269	179	
North Caldwell Boro.....						4																									
Orange.....	29	58	30	22	185	94	4	418	17.12	1	5	1	2		5		42	39	27	80	14	32	33	34	22	12	1	7	21	11	
South Orange Boro.....	2	11	1	3	12	14		44							1		5	1	9	4	5	4	5	1	2				2	2	
South Orange Twp.....	3	1			2	2		6												1	1	1	4	2	1						
South Vailsburg Borough.....	6	1	4	5	6	14	1	37								5	1	1	5	1	4	2	4		6					1	
Vernon.....	1	3	1	1	7	9		22																							
West Orange.....	10	11	2	10	35	22		90							2	1	3	8	8	9	5	7	9	3	2		1	4	4	4	
Totals.....	412	1,019	585	382	2,358	1,422	7	6,165	268,464	16.73	12	76	8	27	12	36	187	13	622	474	335	549	495	511	331	202		8	61	335	255

TABLE 35.—Deaths from all Causes and New Jersey, 1901.
Specified Diseases, in the Statistical Divisions of the State of
Ending June 30th, 1901.

DEATHS AT ALL AGES.										DEATHS FROM THE MORE COMMON CAUSES.																
Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Undefined.	Total, including undefined.	Estimated population.	Death-rate per 1,000.	Remittent fever.	Enteric or typhoid fever.	Small-pox.	Scarlet fever.	Measles.	Whooping-cough.	Consumption.	Brain and nervous diseases.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute rheumatism.	Fœtural.	Violent deaths.	Undefined.
4	1	1	3	5	12	21	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	1	1	1	1	2	5	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	3	1	1	5	17	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	.....	.....	.....	1	3	15	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	1	3	1	5	9	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	3	1	6	5	5	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	1	1	1	7	15	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	1	1	1	3	7	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	1	1	1	4	7	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	8	2	12	34	62	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	5	1	2	15	27	51	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	3	2	1	17	26	51	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3	2	2	5	23	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	4	.....	3	8	8	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	1	.....	.....	9	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	.....	3	4	4	.....	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
27	40	15	22	108	240	454	34,507	13.16	8	2	.....	.....	.....	1	8	61	14	63	32	65	31	30	.....	2	5	20
Totals.....										.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 36.—Deaths from all Causes and Certain Specified Diseases, in the
New Jersey, for the Year Ending June 30th, 1900

MERCER COUNTY, Statistical Divisions.	DEATHS AT ALL AGES.							Estimated population.	Death-rate per 1,000.	DEATHS FROM THE FOLLOWING CAUSES.																				
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Total, including undetermined.			Undetermined.	Remittent fever, etc.	Typhoid fever.	Scarlet fever.	Measles.	Whooping cough.	Diphtheria and croup.	Erysipelas.	Diarrheal diseases of children.	Consumption—males.	Consumption—females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of renal and circulatory systems.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undeclared.
East Windsor.....	2	1	1	4	7	15	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ewing.....	1	1	1	3	6	11	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hamilton.....	7	4	2	19	12	5	51	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Highstown Borough.....	1	1	1	5	7	16	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hopeville Borough.....	1	1	1	7	12	20	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hopewell Township.....	3	3	2	5	10	20	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lawrence.....	1	2	3	6	11	23	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pennington Borough.....	1	1	1	3	6	11	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Princeton Borough.....	4	8	1	19	27	64	64	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Princeton Township.....	2	2	3	8	13	10	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trenton.....	83	174	80	70	402	235	5	1,145	15.44	3	14	1	8	13	1	100	81	64	160	62	121	70	165	64	14	16	55	47	.....	.....
Washington.....	2	2	3	5	12	17	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Windsor.....	1	2	1	3	5	12	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	100	198	94	81	542	405	1,438	97,330	14.75	4	17	1	10	15	4	116	100	78	187	70	152	85	193	83	44	222	87	65	.....	.....

TABLE 33.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th., 1901.

GLOUCESTER COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.								Estimated population.	Death-rate per 1,000.	DEATHS FROM THE MORE COMMON CAUSES.																									
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Undefined.	Total, including undefined.			Remittent fever, etc.	Enteric or typhoid fever.	Small-pox.	Scarlet fever.	Measles.	Whooping cough.	Diphtheria and croup.	Erysipelas.	Diarrheal diseases of children.	Consumption—males.	Consumption—females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undefined.				
Clayton Borough.....	2	3	3	2	8	11	29	29							2																					
Deptford	1	1	1	1	4	4	11	11																												
East Greenwich.....	3	1	1	1	4	21	29	29																												
Elk	1	1	1	1	3	4	8	8																												
Franklin	5	4	2	1	12	13	33	33																												
Glassboro.....	5	4	2	1	10	19	41	41																												
Greenwich	2	9	4	5	15	11	47	47																												
Harrison	3	3	1	1	4	11	20	20																												
Logan.....	3	5	3	1	5	6	22	22																												
Manua.....	1	1	1	1	9	8	20	20																												
Monroe.....	1	4	4	3	10	11	33	33																												
South Harrison.....	1	1	1	1	3	3	5	5																												
Washington.....	1	3	2	2	12	13	33	33																												
Wenonah Borough.....	1	4	1	1	12	7	26	26																												
West Deptford.....	8	8	5	4	21	18	64	64																												
Woodbury	3	2	3	2	10	11	31	31																												
Woolwich.....	35	49	29	27	143	172	456	456			32,048	14.23	4	9	1	6	3	1	13	1	13	29	33	23	53	18	47	29	62	25	11	1	2	81	20	
Totals.....																																				

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TABLE 34. —Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

HUDSON COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.							Estimated population.	Death-rate per 1,000.	DEATHS FROM THE MORE COMMON CAUSES.																								
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Undefined.			Total, including undefined.	Remittent fever, &c.	Enteric or typhoid fever.	Small-pox.	Scarlet fever.	Measles.	Whooping cough.	Diphtheria and croup.	Erysipelas.	Diarrheal diseases of children.	Consumption—males.	Consumption—females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute rheumatism.	Pneumonia.	Violent deaths.	Undefined.		
Bayonne	43	128	74	36	162	68	560	35,298	14.42	.....	8	3	5	3	15	2	81	29	31	100	42	28	28	22	12	18	2	5	30	12	.....		
East Newark.....	6	9	1	6	22	3	47	.....	.....	.....	1	1	2	1	2	.....	6	3	4	23	2	.....	3	3	3	3	1	1	2	3	.....		
Guttenburg.....	11	21	11	7	15	4	69	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Harrison.....	16	55	21	26	81	29	229	10,781	21.24	.....	6	1	.....	1	1	1	34	6	14	33	33	11	10	8	7	.....	.....	.....	.....	.....	.....	.....	.....
Hoboken.....	79	179	117	75	501	208	1,164	60,420	19.27	10	10	1	.....	2	34	1	125	119	60	143	69	108	56	90	67	31	8	112	41	18	12	.....	
Jersey City.....	288	660	436	279	1,591	704	3,970	211,777	18.80	10	42	1	23	9	14	123	7	410	315	221	567	284	297	279	250	111	8	225	242	181	.....	.....	.....
Kearny.....	10	30	13	12	70	67	202	.....	.....	2	3	1	.....	1	25	14	10	27	9	15	16	25	10	4	.....	.....	.....	.....	.....	.....	.....	.....
North Bergen.....	16	43	33	25	141	66	325	.....	.....	.....	2	5	2	1	15	34	30	15	53	7	15	33	49	9	8	.....	.....	.....	.....	.....	.....	.....	.....
Town of Union.....	12	37	38	16	71	49	223	15,557	14.33	.....	1	1	7	1	18	.....	26	12	8	32	15	9	22	15	13	8	.....	.....	.....	.....	.....	.....	.....
Union.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Weehawken.....	5	28	14	11	32	20	110	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Hoboken.....	24	50	45	26	111	59	345	.....	.....	.....	5	1	2	5	18	3	19	8	22	59	24	21	13	27	14	10	.....	.....	.....	.....	.....	.....	.....
West New York.....	6	23	8	2	21	10	70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	516	1,293	811	621	2,818	1,255	7,263	397,642	18.27	18	77	8	63	18	27	233	16	847	551	388	1,076	503	515	476	532	896	203	11	51	475	274

REPORT OF VITAL STATISTICS.

TABLE 35.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

	DEATHS AT ALL AGES.							Estimated population.	Death-rate per 1,000.	DEATHS FROM THE MORE COMMON CAUSES.																					
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Total, including undefined.			Remittent fever, &c.	Bacterial or typhoid fever.	Small-pox.	Scarlet fever.	Measles.	Whooping cough.	Diphtheria and croup.	Erysipelas.	Diarrheal diseases of children.	Consumption—males.	Consumption—females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undefined.
HUNTERDON COUNTY. Statistical Divisions.																															
Alexandria.....	.....	4	1	1	1	5	8	1	26	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bethlehem.....	.....	.....	.....	.....	.....	12	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clinton Borough.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clinton Township.	2	3	1	1	5	17	.....	29	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Delaware.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
East Amwell.....	1	.....	1	1	3	15	.....	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Franklin.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Frenchtown Borough.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
High Bridge.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Junction Borough.....	4	.....	1	1	1	7	.....	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kingswood.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lambertville.....	4	8	2	2	12	24	.....	62	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lebanon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marlton.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Readington.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stockton Borough.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tewksbury.....	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tulon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Amwell.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	27	40	15	22	108	240	2	434	34,697	13.16	8	2	.....	1	8	.....	24	25	22	61	14	63	32	65	31	20	2	5	20	29	.....

TABLE 36.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

MERCER COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.							Estimated population.	Death-rate per 1,000.	DEATHS FROM THE MORE COMMON CAUSES.																						
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Total, including undefined.			Remittent fever, etc.	Enteric or typhoid fever.	Scarlet fever.	Measles.	Whooping cough.	Diphtheria and croup.	Diarrheal diseases of children.	Consumption—males.	Consumption—females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undefined.			
East Windsor.....	2	1	1	4	7	15	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ewing.....	7	4	2	19	12	5	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hamilton.....	1	1	1	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hightstown Borough.....	1	1	1	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hopewell Borough.....	1	1	1	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hopewell Township.....	1	1	1	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lawrence.....	1	1	1	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pennington Borough.....	1	1	1	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Princeton Borough.....	4	8	1	19	27	2	64	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Princeton Township.....	2	3	5	3	5	10	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trenton.....	83	174	86	70	462	285	5	1,165	75,465	15.44	3	14	1	8	13	1	100	81	64	160	62	121	70	165	64	34	16	56	47	1	.....	.....
Washington.....	2	2	3	8	12	17	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Windsor.....	1	2	1	3	5	12	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	100	198	94	81	542	408	13	1,436	97,330	14.75	4	17	1	1	10	15	4	116	100	78	187	70	152	85	193	83	44	222	87	66	.....	.....

REPORT OF VITAL STATISTICS.

TABLE 37. —Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

MIDDLESEX COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.							Estimated population.	Death-rate per 1,000.	DEATHS FROM THE MORE COMMON CAUSES.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Total, including																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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Cranbury	5	1	1	5	5	14</

TABLE 38.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

MONMOUTH COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.							DEATHS FROM THE MORE COMMON CAUSES.																						
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Total, including undefined.	Estimated population.	Death-rate per 1,000.	Remittent fever, etc.	Enteric or typhoid fever.	Scarlet fever.	Measles.	Whooping cough.	Erysipelas.	Diarrheal diseases of children.	Consumption—males.	Consumption—females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undefined.	
Allenhurst Borough.....	1	1	1	1	1	5	2	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Allentown.....	2	2	2	2	2	8	12	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Atlantic.....	10	10	10	10	10	10	10	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Asbury Park.....	2	6	4	3	24	21	60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Atlantic Highlands.....	1	1	1	1	6	1	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Belmar Borough.....	5	5	1	3	7	16	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bradley Beach Borough.....	6	1	1	4	5	17	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Deal.....	5	9	2	3	7	16	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eatontown.....	2	2	2	2	2	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Englestown Borough.....	2	11	5	3	25	28	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fristed.....	2	2	2	2	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Highlands Borough.....	2	2	2	2	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holmdell.....	1	4	2	2	5	9	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Howell.....	7	7	3	12	21	51	51	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Long Branch.....	10	26	11	14	76	45	188	9,180	20.48	1	5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Manalapan.....	1	2	2	1	5	11	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Manasquan Borough.....	2	2	2	2	7	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marlboro.....	1	2	1	8	8	1	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Matawan Borough.....	1	2	3	12	5	23	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Matawan Township.....	4	4	2	2	6	8	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Middletown.....	6	12	9	12	22	19	80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Millstone.....	1	1	1	6	11	18	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Neptune Township.....	9	29	20	8	43	45	155	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Neptune City Borough.....	1	1	1	1	1	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 38.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901—Continued.

MONMOUTH COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.							Estimated population.	Death-rate per 1,000.	DEATHS FROM THE MORE COMMON CAUSES.																				
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Total, including																							
							Undefined.			Undefined.																				
North Spring Lake.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ocean.....	1	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Raritan.....	3	20	6	8	37	28	1	103	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Red Bank Borough.....	5	11	8	4	28	28	1	81	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sea Bright Borough.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shrewsbury.....	5	39	10	8	15	21	1	99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Spring Lake Borough.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Upper Freehold.....	.....	1	2	1	4	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wall.....	2	7	3	13	11	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	64	225	96	76	381	383	26	1,281	83,860	15.01	4	27	6	3	9	18	4	184	59	75	114	56	128	83	125	89	83	810	79	57

TABLE 39.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

MORRIS COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.							DEATHS FROM THE MORE COMMON CAUSES.																							
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Total, including undefined.	Population, census of 1900.	Death-rate per 1,000.	Remittent fever, etc.	Enteric or typhoid fever.	Scarlet fever.	Measles.	Whooping cough.	Diphtheria and croup.	Erysipelas.	Diarrheal diseases of children.	Consumption—males.	Consumption—females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undefined.	
Bernton	5	1	6	5	19	22	59	.....	.....	1	1	1	.....	2	.....	.....	.....	5	3	11	3	7	4	5	.....	.....	.....	.....	.....	.....	4
Chatham Borough	1	1	1	1	5	8	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chatham Township	1	1	1	1	5	8	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chester	5	2	2	2	5	9	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dover City	11	11	10	5	20	32	89	6,121	14.54	2	2	2	.....	4	.....	.....	.....	5	5	12	3	3	6	4	14	.....	.....	.....	.....	.....	.....
Florham Park Borough	1	1	1	1	2	3	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hanover	1	8	2	5	97	94	207	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jefferson	1	1	1	2	4	8	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Madison Borough	4	7	3	3	9	21	47	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mendham .....	.....	1	1	1	4	4	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Montville	2	4	2	3	2	7	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Morris Township	2	1	.....	1	8	7	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Morristown	11	14	11	18	94	62	210	11,462	18.32	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mount Arlington	1	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mount Olive	3	2	1	1	2	10	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nelcong	1	2	1	.....	6	4	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Passaic	4	1	.....	2	13	8	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pequanock	4	4	5	3	8	23	47	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Port Oran Borough	4	9	.....	4	7	1	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Randolph	1	2	1	10	19	1	34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rockaway Borough	3	2	3	1	10	1	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rockaway Township	3	12	5	5	22	13	60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Roxbury	1	5	2	1	19	12	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington	1	2	1	1	2	7	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	64	98	60	66	370	379	1,040	66,280	15.69	3	10	4	2	8	18	3	81	45	62	104	28	105	60	245	64	40	4	9	55	86	

TABLE 41.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

PASSAIC COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.							DEATHS FROM THE MORE COMMON CAUSES.																								
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Total, including undefined.	Population, census of 1900.	Death-rate per 1,000.	Remittent fever, etc.	Enteric or typhoid fever.	Small-pox.	Scarlet fever.	Measles.	Whooping cough.	Diphtheria and croup.	Erysipelas.	Diarrheal diseases of children.	Consumption— males.	Consumption— females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and in- testinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undefined.	
Acquanokanok.....	8	7	10	6	8	15	54																									
Hawthorne Borough.....	4	6	1	1	3	2	17																									
Little Falls.....							57																									
Manchester.....	3	6	5	4	13	15	46																									
Passaic City.....	78	155	89	36	153	68	533	29,754	19.69	1	8		2	6	3	9	2	121	18	20	100	37	32	22	25	24	13	1	5	34	17	
Paterson.....	142	335	160	145	645	338	1,816	106,736	17.01	8	23	2	8	1	14	43	3	246	113	130	241	105	144	107	127	86	72	1	18	106	73	
Pompton.....	4	7	1	2	10	12	36																									
Pompton Lakes Borough.....	1	1		1	3	1	7																									
Totowa.....																																
Wayne.....	2	2	1		6	10	21																									
West Milford.....	2	4			4	18	28																									
Totals.....	244	533	271	198	887	539	2,647	199,597	16.99	13	33	2	13	7	117	57	5	401	139	162	271	161	202	139	177	124	95	2	26	156	101	

TABLE 43.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

SOMERSET COUNTY. Statistical Divisions.		DEATHS AT ALL AGES.							Estimated population.	Death-rate per 1,000.	DEATHS FROM THE MORE COMMON CAUSES.																						
		Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Total, including undefined.			Recurrent fever, etc.	Euteric or typhoid fever.	Small-pox.	Scarlet fever.	Measles.	Whooping cough.	Diphtheria and croup.	Kryptospirosis.	Diarrheal diseases of children.	Consumption—males.	Consumption—females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Dysentery and intestinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undefined.	
Bedminster.....	2	4	5	1	11	8	32	.....	.....	1	.....	.....	.....	.....	1	.....	1	3	3	10	1	4	1	4	1	.....	.....	.....	1	3	.....	1	3
Barnstaple.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bound Brook Borough.....	7	6	6	11	5	.....	34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Branchburg.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bridgewater.....	6	4	5	1	2	5	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Franklin.....	1	8	7	4	10	32	97	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hillsborough.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Millstone.....	.....	1	.....	.....	3	6	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Monterey.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
North Plainfield Borough.....	4	12	.....	.....	23	22	61	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
North Plainfield Township.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Raritan Borough.....	4	7	4	4	13	13	45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Warren.....	1	2	1	1	.....	6	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	25	54	26	29	120	163	418	33,448	12.50	1	8	.....	5	3	2	11	1	36	24	24	52	12	52	28	53	10	18	.....	3	80	21	.....	.....

TABLE 44.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

SUSSEX COUNTY, Statistical Divisions.	DEATHS AT ALL AGES.							DEATHS FROM THE MORE COMMON CAUSES																							
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Total, including undefined.	Estimated population.	Death-rate per 1,000.	Remittent fever, etc.	Enteric or typhoid fever.	Small-pox.	Scarlet fever.	Measles.	Whooping cough, diphtheria and croup.	Erysipelas.	Diarrheal diseases of children.	Consumption— males.	Consumption— females.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and in- terstitial diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undefined.	
Andover	1	2	1	2	6	11	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Branchville Borough.....								.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brooklyn .....								.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Byram	3	5		7	4	19	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Debertown Borough.....	1	1	2	1	3	1	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Frankford			1	1	10	7	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Green	1	2		1	2	2	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hampton	2	9	3	1	9	14	39	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hardyston .....								.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lafayette			1	1	1	3	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Montague .....								.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newton	4	3	3	1	11	19	41	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sandyston	1	1		2	1	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sparta		5	2	1	7	19	34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stillwater	1			1	1	7	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vernon		4	3	3	3	6	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Walpack	1	1	2	12	12	12	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wantage .....								.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	15	37	14	12	76	115	3	272	24,444	11.13	2	1	1	1	3	3	28	9	10	46	8	36	15	31	19	10	1	17	7	25	

TABLE 45.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

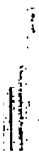
UNION COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.							Estimated population.	Death-rate per 1,000.	DEATHS FROM THE MORE COMMON CAUSES.																						
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Total, including																									
							Undefined.			Undefined.																						
Clark	3	5	4	18	18	1	44	1	1	1	1	1	2	1	10	6	2	8	2	3
Cranford	71	180	107	69	342	185	2	956	58,789	17.78	1	.....	.....	.....	1	39	1	132	73	42	135	.....	53	84	56	36	26	.....	.....	67	43
Elizabeth .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fanwood Borough .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fanwood Township	1	.....	.....	2	.....	.....	.....	3	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Linden Borough .....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Linden Township .....	.....	.....	.....	.....	.....	.....	.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mountain Side Borough .....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Providence Borough .....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Providence Township	1	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plainfield	19	38	17	16	116	74	.....	280	15,717	17.82	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rahway	5	19	6	6	27	49	.....	112	7,955	14.11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Roselle Borough	1	2	.....	.....	.....	.....	.....	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Springfield	3	2	1	.....	.....	.....	.....	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Summit City	6	12	8	3	24	15	.....	68	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Union	2	6	2	4	8	14	.....	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Westfield	7	19	8	8	15	22	.....	74	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	119	286	148	112	568	403	4	1,640	102,143	16.06	4	20	6	211	54	5	197	106	82	231	81	127	134	117	80	89	1	13	109	83

TABLE 46.—Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1901.

WARREN COUNTY, Statistical Divisions.	DEATHS AT ALL AGES.							DEATHS FROM THE MORE COMMON CAUSES.																									
	Under one month.	Under one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Undeclared.	Total, including undeclared.	Estimated population.	Death rate per 1,000.	Remittent fever, etc.	Enteric or typhoid fever.	Small-pox.	Scarlet fever.	Measles.	Whooping cough.	Diphtheria and croup.	Erysipelas.	Diarrheal diseases of children.	Consumption— males.	Consumption— females.	Acute lung diseases.	Brain and nervous diseases.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and in- testinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.	Undeclared.	
Allamuchy.....	1	1	1	1	4	8	9	22	Belvidere.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	2	1	3	1	.....	3	5	5	.....	.....	.....	.....	1	1
Blairtown.....	1	1	1	1	4	9	17	22	Blairtown.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	6	.....	3	3	5	.....	.....	.....	.....	.....	1	2
Franklin.....	2	2	2	2	4	14	22	22	Franklin.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Frelinghuysen.....	2	2	2	2	4	16	22	22	Frelinghuysen.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Greenwich.....	2	2	2	2	4	13	19	19	Greenwich.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hackettstown.....	2	4	1	7	18	32	32	32	Hackettstown.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hardwick.....	1	1	2	3	7	13	13	13	Hardwick.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Harmony.....	1	2	1	1	3	8	16	16	Harmony.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hope.....	1	2	1	1	3	8	16	16	Hope.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Independence.....	1	4	1	1	4	15	18	18	Independence.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Knowlton.....	1	1	1	1	5	11	18	18	Knowlton.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lopatcong.....	2	4	2	2	3	14	14	14	Lopatcong.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Manfield.....	5	7	2	7	11	24	56	56	Manfield.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oxford.....	1	1	1	1	1	2	2	2	Oxford.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pahquarry.....	0	21	16	11	52	42	137	137	Pahquarry.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Phillipsburg.....	3	8	3	6	6	27	27	27	Phillipsburg.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pohatcong.....	3	8	3	6	6	27	27	27	Pohatcong.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington Borough.....	1	5	4	4	14	30	57	57	Washington Borough.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington Township.....	1	1	3	1	4	7	17	17	Washington Township.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	80	59	85	37	133	232	537	537	Totals.....	37,881	14.18	1	8	1	9	1	9	1	52	16	28	69	16	89	30	70	47	19	3	33	28

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